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AN EXAMINATION OF THE DEFINITION OF FAMILY CRISIS

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF SCIENCE

IN

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

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.....
Supervisor

.....

.....

Date . . February 27, 1980 . .

DEDICATION

This work is respectfully dedicated to Mrs. G.C. Wagner. That it has been completed reflects her faith in the future and in her grandson.

"What saves a man is to take a step.
Then another step.
It is always the same step, but you have to take it."

Saint Exupéry

Abstract

The present thesis has conceptually and empirically studied the definition of the term "family crisis". It was initially found that the usage of the terms "crisis" and "family crisis" is ambiguous, and the author concluded that terminology-related problems were impeding theory and research in the crisis area.

A questionnaire was designed to assess the features associated with the family crisis phenomena. A conceptual model of family crisis was presented to facilitate an appreciation for the current status of the concept. Empirical analysis was designed to reveal the ratings of each crisis feature, made by a professional sample (psychologists), and to search for factors in the responses.

A hierarchy of features was produced and six factors extracted. Together, these findings represent an empirically based definition of family crisis. This definition appears to be comprehensive yet practical, and complementary to the theoretical approach presently adopted. This study represents a rudimentary step in achieving a generally acceptable definition of family crisis.

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CHAPTER I

INTRODUCTION

Purpose of the Study

The purpose of the present study is to gain insight into the current state of the concept of family crisis, as defined and used by a group of practitioners. This study is being conducted to mollify the confusion surrounding the definition of the concept of family crisis. Its basic purpose is to identify and assess features commonly used to define crises and to determine the features or factors that appear to best define the phenomena of crisis.

To initiate this task, a broad review of the crisis literature was made. The purpose of this review was to establish a historical perspective of the usage of the terms "crisis" and "family crisis", and to identify the features commonly associated with the definition of these terms. A secondary purpose of the review was to outline previous conceptual approaches to the crisis phenomena. Features associated with the definition of crisis, which were identified in the review, were formulated into a questionnaire and a sample of psychologists was asked to rate each feature with regards to their own "working definition" of family crisis. The purpose of this rating was to attempt to clarify and reduce the number of features presently associated with the definition. To gain further insight,

respondents were asked for their own definitions and pertinent demographic information was collected. A conceptualization of family crisis, one synthesizing classical and new theory, was elaborated to provide a framework for considering the responses. Finally, the results were analyzed and conclusions drawn.

The Problem

The problem of the present investigation was to articulate and sharpen the definition of family crisis. This problem was approached using an empirical process intended to assess the meaning of the term as it is employed by practitioners in the crisis field. The author believed that the utilization of a professional sample would provide a sufficient combination of experience and education to address the relevancy of the features commonly associated with the definition of family crisis. While many features were isolated (twenty-six), it seemed reasonable that they could be reduced to a more practical number. The present analysis was designed to achieve this reduction. To gain maximal insight, respondents' definitions were collected and their major features summarized. This provided an opportunity to compare practitioners' definitions with those identified in the literature. To aid in the evaluation of the present problem, this study addressed the following questions:

1. Can the large number of features presently associated with the definition of family crisis be reduced to a smaller number of factors?

2. What is the present state of conceptualization in the family crisis area, and how do the present results relate to this aspect?

3. Do the definitions collected from the practitioners reflect the features presently identified in the literature?

4. Can a relationship be ascertained between various demographic variables (experience, education, etc.) and the ratings of the definitional features?

Need for the Study

A number of authors have called for studies on the definition of crisis and have underscored its weakness as a scholarly term (Rapoport, 1962; Robinson, 1968; Halpern, 1973). A number of theoretical reviews have been made of the crisis concept (Miller and Iscoe, 1963; Darbonne, 1967; Robinson, 1968; Eastham, Coates and Allodi, 1970), but only two empirical studies have addressed the definition of the term (Bloom, 1963; Halpern, 1973). An empirical assessment of the current status of the definition was therefore considered a high priority. A better understanding of the features which are used to define this term would facilitate both theory and research in the area. The literature reflects ongoing confusion regarding the term (eg. Hansen

and Johnson, 1979). This creates various problems, for example, in the comparison of studies on specific crisis phenomena that utilize different definitions (see Jacoby, 1969). Unfortunately, these definitional differences are seldom taken into account. As conceptualization becomes more sophisticated, more precise and concise definitions of the terms crisis and family crisis will have to be adopted.

The terms crisis and family crisis are presently poorly delineated and a wide range of usage exists for both terms. The focus of the present work, while on family crisis, also includes a broad range of crisis materials. The results of the present work are intended to be generalizable to the family crisis area and suggestive to the general crisis field of study.

Significance of the Study

Crises are generally very real and painful phenomena. The experience of crisis is a universal one having various impacts on individuals. The subjective aspect of the experience and the multitude of causes and contexts associated with crisis have greatly complicated efforts to study the phenomena. Generally, studies have been either descriptive or have focused upon palliating crisis. The majority of studies in the area are hampered by definitional problems and few studies of the definition of crisis have

been attempted. The present study was formulated to clarify this situation.

Plan of the Thesis

The material presented here and in Chapter II substantiates the need for an empirical study of the definition of family crisis. Chapter II also gives the historical context of crisis study and provides insight into the conceptual issues associated with the phenomena. Chapter III elaborates one conceptualization of family crisis which promises to enhance understanding of the phenomena. Chapter IV describes the thesis' methodology and in Chapter V the results are presented. In Chapter VI the results are discussed in terms of the conceptual model, and comments and recommendations for future research in the family crisis area are made.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter contains a review of the term "crisis" in the social sciences from 1909 to the present, and identifies various features associated with its definition. A broad spectrum has been covered with considerable elaboration of a few key authors (eg. Thomas, Hill, etc.). Because of their lack of delineation in the literature, both crisis and family crisis materials appear. While the latter is emphasized, it is important to realize that the source of the materials is diverse.

A tabular summary of the major features associated with the definition will be presented. This summary will assist the reader in gaining a perspective of the literature. A brief summary of the basic concepts elaborated will also be presented. This will help to sharpen the issues in the crisis area of study and outline its conceptual status.

Body of Review

The Contribution of W.I. Thomas

The first serious discussion of crisis from a socio-psychological perspective was made by W.I. Thomas in 1909.

In introducing the work of Thomas, Volkart[1] stated that Thomas:

> Considered crises as among the most significant of human experiences, affecting the definitions of individuals and groups, their behavior, and finally influencing the content of culture and personality, as well as the rate and direction of social change (Volkart, 1951, p.13).

Indeed, "the mind itself is the product of crisis" (Thomas, 1909, p.17).

Thomas considered the situation to be of primary importance in understanding behavior.

> Behavior is determined by certain conditions, which comprise the 'situation', including the state of the organism, the objective environment and the subjective manner in which these are perceived, evaluated and made conscious (Volkart, 1968, p.3).

Either new situations or variations of old situations may precipitate a crisis. Scientific understanding of the crisis phenomena would be gained by observing and comparing the behavior of individuals or groups in a number of different situations. Such observations would "reveal the relative influence of different sets of determinants on human action" (Volkart, 1968, p.3). In addition to its importance to scientific understanding, the situation and its definition had great meaning to the individual as "if men

---

[1] Volkart has provided a concise and readable introduction to the ideas put forth by Thomas, which closely reflects Thomas' original thinking.

define situations as real they are real in their consequences" (Thomas and Thomas, 1928, p.572).

Central to this approach is the definition made of a situation. As each person defines a given situation relative to his own unique experiences and outlook, various definitions will come to exist. Differences in these definitions provoke disruptions between individuals and between the individual and his society or culture (which collectively possesses a definition exhibited in traditions, laws, customs, etc.). Periodic reviews of the definitions of situations by an individual will give feedback on his behavior and provide direction and motivation to refine "adjustive behavior" and to minimize conflicts.

Thomas (1909) further concluded that the definition of the situation is an interpretation which would eventually become a behavior pattern (habit). Day to day judgments and decisions are quickly made without conflict on the basis of these habits. Control is maintained by habit and the attention of the individual is not called into play. In this normal state, situations "can scarcely be said to exist" as there is no need to review the definitions of situations when habit is maintaining control.

In the view of Thomas, a crisis arises when some event disrupts the operation of habits, disrupting control and bringing attention to bear on the given situation (and its definition). The definition is reviewed and attention is directed to the adjustive behavior required to regain control.

When control is restored, the conflict will disappear and habit will once again direct activity.

Events such as "birth, death, adolescence and marriage, while not unanticipated, are always foci of attention and occasions for control" and are thus associated with crises (Thomas, 1909, p.17).

> When influences appear to disrupt habits, when new stimuli demand attention, when the habitual situation is altered, or when an individual or group is unprepared for an experience, then the phenomenon assumes the aspects of 'crisis' (Volkart, 1951, p.12).

The origin of these disrupting influences could be diverse; from intrapsychic features to conflicts between the interests of individuals, groups or society at large.

For Thomas, the perceived simplicity of crisis belied the actual complexity of the event. Crisis was "a threat, a challenge, a strain on the attention, a call to new action" (Volkart, 1951, p.12). "It is simply a disturbance of habit and it may be no more than an accident, a stimulation, a suggestion" (Thomas, 1909, p.18). Yet a single crisis could produce a change in the fundamental outlook of an individual and alter the course of a life. The influence of crises on the individual's personality eventually found its way into society at large, having an indirect but potentially significant impact.

Thomas recognized many important aspects of the crisis phenomena that are generally accepted today. He was aware

that the same crisis event would not have uniform effects and that "the power of the attention to meet a crisis is primarily an individual matter" (Thomas, 1909, p.19). He perceived that "the character of the accommodations already made affects the character of the accommodation to the new crisis" (Thomas, 1909, p.20). The association of security with habit and past, proven behavior was expressed and was the basis for his statement "change is consequently introduced with a maximum of resistance" (Thomas, 1909, p.21). Change could be either advantageous and lead to improvement, or be "disastrous" and worsen the situation. Either way, the change implied "a loss of settled habits and disorganization" (Thomas, 1909, p.21).

Crisis and growth were equated by Thomas (1909, p.18) in that "the degree of progress of a people [had] a certain relation to the nature of the disturbances encountered, and that the most progressive have had a more vicissitudinous life". In this respect science could turn to "great men" having a profound influence on their culture, and gain insight from their handling of crisis. He gave Moses, Mohammed, Confucius and Christ as examples of such men.

Thomas also realized that growth could be curtailed in a group if the "level of culture of the group" was inadequate to allow for readjustment and coping with crises. The implication of this for the family is that individual

members may be limited in their crisis-meeting resources by the level of their family, or that a family could be limited as a group by the level of the culture to which they belong.

In summary, Thomas made many perceptive observations on the crisis phenomena and viewed it as a catalyst, "disturbing old habits, evoking new responses, and becoming a major factor in charting new developments" (Volkart, 1951, p.13).

Early Views of the Family in Relation to Crisis

The Family as an "Organic System". In 1927, E. Mowrer discussed family disorganization and disintegration. Family disorganization was defined as a relative differentiation of the interests and aims of family members which tended to terminate in the disruption of the marriage union. Family disintegration was termed the actual termination of the family relationship, be it by divorce, separation or desertion.

Mowrer's perceptions suggest a systems perspective in that the parts of the family were seen to act differently when combined, as compared to when in isolation. The "law of the aggregate" therefore may not be a function of the laws of the separate parts. Mowrer (1927) referred to the family as a dynamic "organic system" and indicated that disorganization was a relative concept, affecting all families to some degree. Several factors of family disorganization

were elaborated and developed into a questionnaire used to gather information via interview settings.

Angell's Family Types. The depression was the motivation and setting for a major study of the family published in 1936 by Angell. An intimate case study was made of fifty families in which the forces influencing the family were divided into two main categories: those that tend to organize and integrate the family and those that tend to disorganize it. Analysis showed that changes in the external environment could be accommodated by families in relation to the degree of integration and flexibility present in them. Based upon these two features of family life and the cases studied, family types were developed. These types represented "actual family relations and potential family processes" (Angell, 1936, p.259).

Angell's work contained an implication that was significant for the future of family study. This implication was that fairly discrete family types may exist (in terms of structure and process) and that certain types of families may react to situations in characteristic ways. Other family researchers began to explore family types and to search for commonalities in the reactions of various types of families.

The Lindemann Study of Grief

Lindemann's (1944) classic study of the reactions of grief focused upon the survivors and relatives of the victims of a nightclub fire in Boston. Acute grief was seen to constitute an identifiable syndrome with both psychological and somatic symptomology. This view was based upon the observation of a remarkable uniformity in individuals' reactions to the crisis. Common factors which were present included respiratory distress and an association of somatic distress with mention or thought of the deceased. Some patients attempted to avoid experiencing the syndrome at any cost and soon found themselves in states of exhaustion and digestive distress (loss of appetite, nausea, etc.). Psychological reactions included preoccupation with guilt, and general disruptions in interpersonal relationships. Feeling emotionally cut off from others, and experiencing generally high levels of irritability and anger, were also common.

Lindemann (1944) was able to distinguish two basic types of reaction; one, often involving a preoccupation with the above factors, led to poor or pathological grief reactions. The second, characterized by successful grief work, led to adjustment in the patient's life. Using therapy, many cases of pathological grief were transformed into normal grief reactions and resolved.

Lindemann introduced two critical ideas into the study of crisis. First, that individuals' reactions to a crisis situation may be very similar, and that features may be identifiable with groups of reactions (eg. groups of successful resolvers, and groups of those who show pathological reactions). Secondly, that given appropriate techniques, intervention could be effective in helping people adjust or in transforming poor adjustment to good.

Koos Studies Families in Trouble

During the late 1940's, family crisis bloomed as a field of study. Earl Koos published a book on the subject entitled Families in Trouble, in 1946.[1] Koos defined crises as "those situations which create a sense of sharpened insecurity or which block the usual patterns of action and call for new ones" (Waller, 1951, p.457). Koos found that almost any event could precipitate a crisis and he considered the important variable was not the event itself, but "what happens as a result of the event" (Waller, 1951, p.459).

Koos believed that family crisis was relative to a number of factors, including the social and cultural heritage of each family. Associated with this view was the importance of the social milieu in dictating what shall and shall not be regarded as a crisis. Koos (1950) went on to elaborate social class differences in family crisis.

---

[1] The author was unable to obtain this volume and therefore relied on secondary sources (Hill, 1949; Waller, 1951).

The Contribution of R. Hill

One of the most significant contributions to the understanding of family crisis was made by Reuben Hill in Families Under Stress (1949). This work studied adjustments made by families to the separations and subsequent reunions forced by the war. Family crises were associated with the presence of three variables;

> (1) the hardships of the situation itself,
> (2) the resources of the family, its role structure, flexibility, and previous history with crisis, and
> (3) the definition the family makes of the event (Hill, 1949, p.7).
>
> Any rupturing of family relationships which forces reorganization of the family pattern not only constitutes a family crisis, but is a threat to family habits and family unity (Waller, 1951, p.454).[1]

Hill thus reflected the view of Thomas: a crisis was an event which "interrupted the run" of habit.

Hill (1949) categorized crisis on the basis of the following criteria: by source (either extra-familial or intra-familial), by the effects upon the family configuration (dismemberment and demoralization), and by the type of event impinging upon the family. Accession, or the addition of a family member, was also included. A summary of these types is presented in Table I, "Hill's Classification of Family Breakdowns", from Hill (1949, p.10).

---

[1] Hill's views are presented in Waller, 1951, a volume revised by Hill.

TABLE I

HILL'S CLASSIFICATION OF FAMILY BREAKDOWNS

Dismemberment Only	Accession Only	Demoralization Only	Demoralization Plus Dismemberment or Accession
Loss of child	Unwanted pregnancy	Non-support	Illegitimacy
Widowhood	Deserter returns	Progressive dissension	Runaway situations
Orphanhood	Stepmother, step-father additions	Infidelity	Desertion
Hospitalization	Some war reunions		Divorce
War Separation			Imprisonment
			Suicide or homicide

This schema gave Hill a method by which to organize life events and predict which life events may be commonly associated with crisis.

The "roller coaster profile" developed by Hill (1949), is a conceptualization of the pathways a family may follow after a crisis event occurs. The stepwise consideration of crisis, disorganization, recovery, and reorganization, helped reduce the mystery involved around the adjustment process. This model could be adapted (see Hill, 1949, pp.98-99) to fit various families' styles of adjustment. The basic model is presented in Figure 1, "Hill's Roller Coaster Profile", from Hill (1949, p.14).

Hill's formula (equation) of crisis combined the event, definition, family resources and the crisis. The approach was represented as

> A (the event) interacting with B (crisis-meeting resources) produces X (the crisis). OR,
> A interacting with C (the definition the family makes of the event) produces X. OR,
> A interacting with B leads to C which leads to X (Hansen and Hill, 1964, p.804).[1]

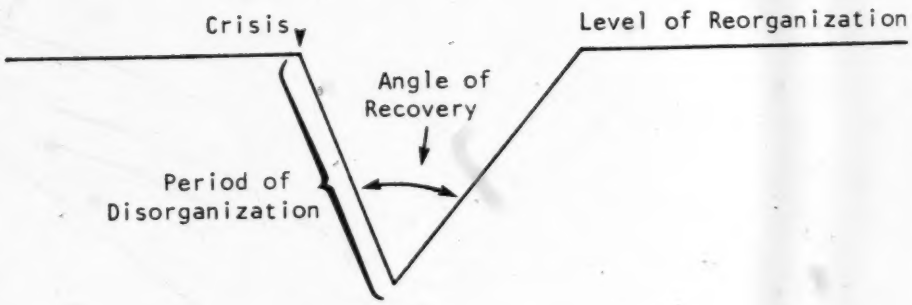
Armed with a stepwise approach, researchers could determine where factors fit into the crisis picture. For example, it can be seen retrospectively that Angell (1936) addressed the B factors in the equation or the crisis-meeting resources. Again, each specific component of Hill's formulation could

---

[1] For the convenience of the reader, this updated (and slightly modified) formulation is presented.

FIGURE 1

HILL'S ROLLER COASTER PROFILE



be scrutinized and knowledge of the general crisis area advanced.

The 1949 study conducted by Hill involved the analysis of a detailed questionnaire given to 135 families experiencing the crisis of wartime separation. Using the adjustment profile, it was concluded that: (1) not all families start with the same degree of internal adjustment; (2) the "slope" of disorganization differs from family to family; (3) the angle of recovery and time taken to reach recovery are variable; and (4) the road to recovery is rocky and seldom can be represented by a straight line even when reorganization is successful. Hill's study confirmed that previous crisis experience can yield a great deal of information as to the pattern of adjustment in subsequent crises.

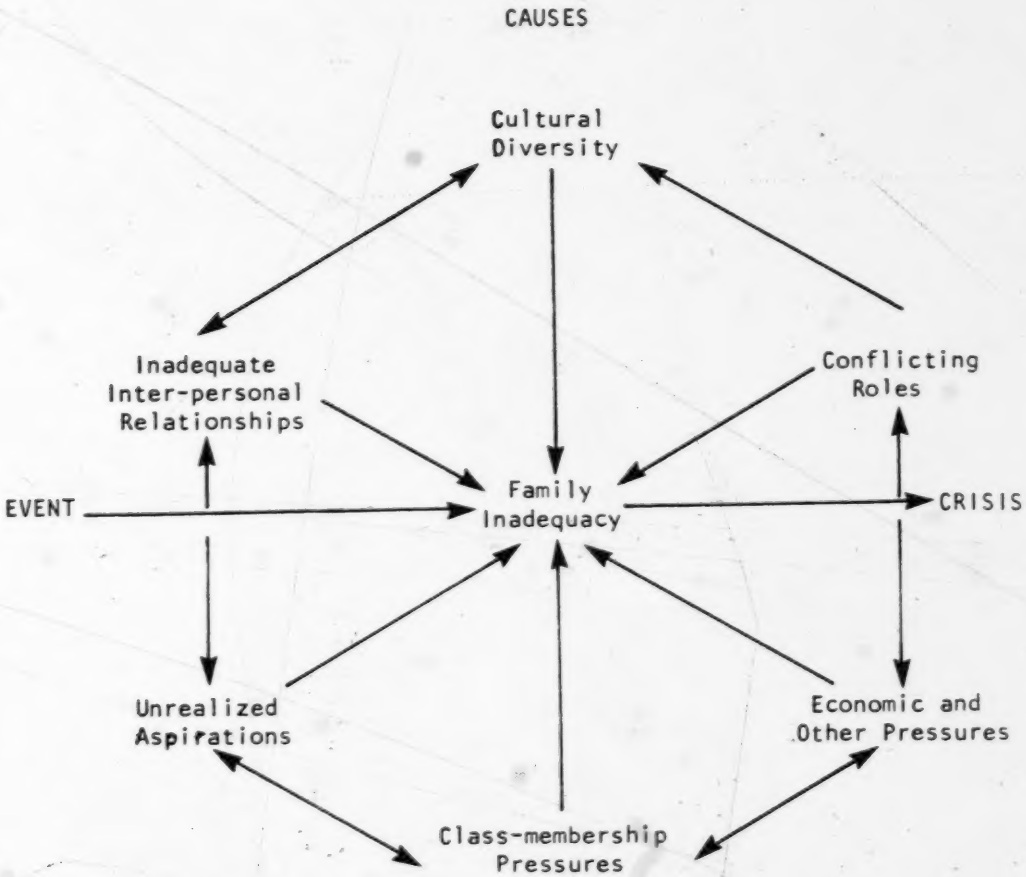
Hill's study also explored causation and supported the model Koos (1946) employed to demonstrate the inter-relationship of causes. This diagram is presented in Figure 2, "The Interrelationship of Causality" (from Hill, 1949, p.106).[1] Causation was seen as a multi-factorial phenomena. Often a minor initial cause sets in motion a build up of tensions in other areas of the family that eventually precipitate crisis.

---

[1] This diagram was drawn by Koos and first appeared in "Families in Crisis", In The Dynamics of Family Interaction, ed. by Evelyn Duvall and Reuben Hill (Washington: The National Conference on Family Life, 1948, mimeographed report).

FIGURE 2

THE INTERRELATIONSHIP OF CAUSALITY



Hill's great care in applying terminology helped prevent confusion, clarify processes and segregate family crisis into manageable component parts. Perhaps Hill's greatest insight lay in his understanding of crisis as a process of life that could be examined stepwise and studied in its component parts.

Crisis Study in the 1950's

Lindemann Elaborates Crises. Lindemann (1955) presented a paper on the meaning of crisis, based upon a study of bereavement reactions. Various inevitable events in the life cycle were considered hazardous situations to emotional equilibrium (eg. bereavement, birth of a child, marriage). These situations create an emotional strain that would in some persons lead to a crisis. "For persons whose internal psychic patterns make a situation especially meaningful emotionally, a crisis may develop" (Lindemann, 1955, p.315). The crisis upsets the structuring of "intrapsychic forces" and a new emotional equilibrium will often be formulated. Crises cause a realignment of relationships with significant others and stimulates adaptive behaviors. During a crisis, persons are particularly sensitive to help from professionals, and Lindemann discusses the role of the mental health worker during crises.

Tyhurst Views Crisis. Tyhurst (1957) emphasized "transitional states" and attempted to focus on the "state of change" of individuals rather than on the actual change itself. The social and psychological circumstances within a change period were emphasized. The situation was used to examine various types of change, community disaster, retirement, etc.

Tyhurst (1957) elaborated upon various features of the change process, indicating that the intensity of the change would be associated with the extent to which a person's "premises" were called into question. These premises involved the assumed roles, personal values, and life image held by individuals. Other general features of transition included the "consistent appearances of a phase of disturbance or turmoil" (Tyhurst, 1957, p.160). The absence of this phase may imply that no crisis took place, that individuals' defenses denied the awareness of the event, or that a "pathological delay" took place. Disturbances commonly involve "body function, mood, mental content, and intellectual function" (Tyhurst, 1957, p.160).

It was pointed out by Tyhurst (1957) that various crisis situations may be accompanied by specific types of features in the transition syndrome. Within the transitional state all such symptoms and disturbances should be regarded as normal, and further, that the transition and disturbance should be regarded as an opportunity for growth.

Tyhurst also strengthened the notion that the behavior of the individual during these transitions was crucial in its effect on subsequent behavior and even upon the mental health of the individual. He pointed out that this transition was an optimum time for intervention to take place. Related to intervention, the individual should be kept in the situation if possible, and have his irrational attitudes and negative responses accepted. The input of interveners may be minimal and yet be highly effective and should always take place in the context of the social system or network of relationships of the individual.

Hill Refines His Approach. Hill's (1958) second major contribution to the crisis literature entailed a refinement of his earlier ideas. The family, a small group organized internally into paired positions, was considered a closed system that could open itself at its own discretion for transacting with outside agencies. The stressor was defined "as a situation for which the family has had little or no prior preparation" and which therefore was problematic (Hill, 1958, p.34). Each stressor was unique to each family and would be unique in the amount of hardship it created.

> Hardships may be defined as those complications in a crisis precipitating event which demand competencies from the family which the event itself may have temporarily paralyzed or made unavailable (Hill, 1958, p.35).

Again, Hill felt that for an event to be stressful the family must define it as stressful. This definitional aspect reflected the families' values, perceived roles, previous experience with crisis and previous definitions of crisis. The families' subjective definition was seen to exist within the cultural definition formulated by the community and the objective definition which may be formed by an impartial observer.

Hill (1958) summarized eight general factors associated with family crisis which were derived from previous studies. These factors are presented in Table II, "General Crisis Factors Elaborated by Hill" (from Hill, 1958, p.49).

Crisis Study in the 1960's

In the period of the 1960's a great deal of crisis research was conducted. The period saw several different approaches to the study of crisis and family crisis.

Farber Examines Family Crisis. Farber (1960, p.5) defined family crisis as "the breakdown of patterns of conduct and values which had been developed to guide activities of family members through the family's life cycle". The birth of a severely mentally retarded child provided the setting for a "games of strategy" approach to family crisis. In this view a "game consists of a set of

TABLE II

GENERAL CRISIS FACTORS ELABORATED BY HILL

1. Crisis-proneness, the tendency to define troubles as crises, is distributed disproportionately among families of low family adequacy.

2. The course of adjustment is a roller-coaster pattern of disorganization--recovery-readjustment (corroborated as modal pattern for separation but not for reunion).

3. Family reactions to crisis divide between short-time immediate reactions and secondary long-time adjustments.

4. Demoralization following a crisis usually stems from incipient demoralization before the crisis.

5. The length of time a family continues to be disorganized as a result of crisis is inversely related to its adequacy of organization.

6. Unadaptable and unintegrated families are most likely of all to be unpredictable deviants in adjusting to crisis.

7. Foreknowledge and preparation for a critical event mitigates the hardships and improves the chances for recovery.

8. The effects of crisis on families may be punitive or strengthening depending on the margin of health, wealth, and adequacy possessed by the family.

admissible moves which, combined in certain ways, result in a resolution of a contest". "The family crisis presents a situation which requires solution" (Farber, 1960, p.6). In order to achieve this solution family members had to select one or more available and admissible alternatives (moves). Given the proper combination of moves the crisis would be resolved. The whole process would be considered a "game of strategy" type of event.

Farber (1960, p.90) used marital integration as a criteria for successful crisis resolution and found that it "is not a function of either (a) the severity of the crisis situation, or (b) the strategies used by the family, but is a resultant of the combination of the two". The implication was that for counselors to assist the family in crisis, both factors would have to be considered. Farber also noted that strategies of coping could be idiosyncratic and may not be anticipated by the model or by the families themselves.

A Study of Family Stress. A study involving family stress precipitated by a premature birth was presented in 1960 by D. Kaplan and E. Mason. This study used the term "stress" to refer to the psychological upset or disequilibrium experienced by individuals. There appears to be little difference between what they term as stress and what others term as crisis.

Parad and Caplan Study Family Crisis. Parad and G. Caplan (1960) presented a framework for the study of the family in crisis. They studied the active coping efforts of families during crises associated with selected "stress" situations (prematurity, congenital abnormality and tuberculosis).

Crisis was seen to have a peak or sudden turning point, at which time tension reaches its maximum and stimulates "the mobilization of previously hidden strengths and capacities" (Parad and Caplan, 1960, p.55). As in Caplan's later work, reviewed below, a homeostatic approach to crisis was taken. In this approach, a crisis was considered to be a period of disequilibrium during which time the homeostatic mechanisms of the individual were overpowered. The authors pointed out that in some cases conflict and unhappiness are appropriate responses to situations and that adaptive responses to stress can produce solutions to previously unresolved problems.

Data from the Parad and Caplan (1960) study were organized into three broad areas: family life-style, intermediate problem solving mechanisms, and need-response patterns. The family life-style (the normal, stable family organization) incorporated values, communication and roles. Intermediate problem solving mechanisms represented the family life-style during a crisis situation. The need-response pattern described the way families satisfied the basic needs of their members.

Parad and Caplan (1960) outlined the impact of crisis in five points. First, that the event by definition had no solution in the immediate future with the given resources at hand. Secondly, that the problem strained the psychological resources of the family and created feelings of helplessness. Thirdly, the situation was perceived as a threat to the "life goals" of the family members. Fourth, that during the crisis period tension would build to a peak and then fall. And finally, that the situation would awaken unresolved and key problems from the past.

Caplan Elaborates Crisis. Gerald Caplan (1961) continued to contribute to the area of crisis through his work on Community Mental Health. Again, crisis was perceived as an obstacle to life goals that could not be surmounted through the usual, available problem-solving methods. Disorganization resulted and attempts to find a solution were stimulated until "some kind of adaptation" was achieved (Caplan, 1961).

In his attempts to outline the situations of crisis, Caplan presented various definitions of crisis. One involved a person facing a difficulty, "either a threat of loss, or a loss in which his existing coping repertoire is insufficient", and in which he therefore has "no immediate way of handling the stress" (Caplan, 1961, p.41). New behavior was clearly required to handle the situation.

Caplan (1961) suggested that some solution (be it a "good" or "bad" one) would be found in from four to six weeks.

Rapoport Views Family Crisis. Lydia Rapoport (1962) focused upon definitional issues and noted that the term crisis was "generally used in a rather loose and indeterminate way", and covered "a variety of meanings" (Rapoport, 1962, p.22). She differentiated stress from crisis; the former was assumed to have pathogenic potential, the latter of having a growth-promoting potential.

Rapoport (1962), building upon the works of Thomas and Tyhurst, advanced the view that crisis consisted of a breakdown in habitual problem-solving methods leading to a disequilibrium. Crisis could lead either to higher or lower levels of functioning of mental health. She also noted that as past crisis events come back into consideration during a crisis, people effectively have a "second chance" to resolve any outstanding conflicts.

Bloom Empirically Studies the Crisis Definition. Bloom (1963) attempted to clarify the concept of crisis by examining the nature of agreement among theoreticians on a number of theoretical case studies. This study was the first (and only to date) to attempt to derive a definition from an empirical study of the term's clinical usage.

Fourteen case histories were constructed by Bloom (1963) to incorporate various crisis-related factors. Eight experts judged whether or not each case constituted a crisis and why. The results showed that two factors were related to the crisis judgment. These were the presence of a known precipitating event and a resolution which took between one and two months (as opposed to a one week or less resolution). The primary factor was found to be the presence of a clear precipitating event, in the absence of which, reactions were likely to have been viewed as psychiatric disorders rather than as crises.

Ego Growth Through Crisis. A psychoanalytic perspective was employed by Cumming and Cumming (1963). Central to this approach was the view that successful resolution of crises enhanced the ego by permitting periodic "disequilibriums" followed by "re-equilibriums" at higher levels of ego organization. These re-equilibriums help adapt the ego to changes in the environment.

Crises were divided into three main classes: biological crises (of which growth and illness are the prototypes), environmental crises, and adventitious crises. Environmental crises involve major changes in the environment and can include retirement, migration and bereavement. Adventitious crises usually occur suddenly and without warning, disaster being the most severe example.

Based upon the work of Tyhurst, Cumming and Cumming (1963) used the term crisis to refer to the impact of any event that challenged the "assumptive state" and forced the individual to change his view of, or readapt to, the world or himself or both. When this occurred it was likely that new combinations of established sets that have worked in the past would be tried.

> If new sets must be developed, the crisis will last longer, the ego will be more open to change and reorganization may be at a slightly higher level of generality (Cumming and Cumming, 1963, p.54).

Ego growth was therefore seen as a series of disequilibriums and subsequent re-equilibriums between the individual and the environment.

The Therapeutic Value of Crisis. The psychoanalytic view was the basis for a discussion of the therapeutic value of crisis by Forer (1963). Forer considered crises not only as inevitable components of biological and social life, but as prerequisites for growth. "Without the impact of crisis-generating experiences, comparatively few people would attempt to change themselves" (Forer, 1963, p.276). In this sense crises could be an important impetus "to the development of thinking and learning processes" (Forer, 1963, p.276).

Forer (1963) differentiated psychological crisis from disastrous events as disastrous events need not precipitate a crisis in a given individual. This, in part, is determined

by the threshold for crisis, a high threshold indicating a more rigid and impervious individual. Too low a crisis threshold implied few or low resources available to deal with a crisis and achieve adaptive reorganization. Clearly an optimum threshold between the two extremes would produce "frequent small crises that represent almost continual change, self expansion, and widened grasp of the world" (Forer, 1963, p.277).

Miller and Iscoe Review Crisis. The first attempt to review the crisis area was made in 1963 by Miller and Iscoe. In this review, various factors associated with the crisis phenomena were identified, and the majority of the above authors were included. Five common aspects of emotional crisis were extracted from the literature which included a time factor, changes in behavior, subjective aspects, relativistic aspects, and organismic tension. The authors went on to discuss the implications of crises to the area of mental health, and to discuss research possibilities.

Crises as Turning Points. It appeared to R. Rapoport (1963) that all crises could be viewed as turning points, or as points of no return. "If a crisis is handled advantageously, it is assumed the result for the individual is some kind of maturation or development" (R. Rapoport, 1963, p.75). Rapoport presented the view that critical turning (transition) points exist for the family which are

normal and expectable (eg. marriage, birth of the first child, death of spouse, etc.). She went on to describe the intrapsychic and inter- and intra- personal tasks associated with marriage.

Crises as Changes in Outlook. Allport (1964) conceived crises as situations of emotional or mental stress that required major changes in "outlook" over a short period of time. The resulting changes could be either progressive or regressive in a person's life. Crises were considered normal and expected aspects of personality development. Crises were identified in college students, particularly in their sophomore year, as this was seen as the final transition from childhood to adulthood.

Caplan's Refined View. Gerald Caplan discussed crisis again in 1964 and presented a slightly refined approach. The importance of "life crisis" was emphasized and the perspective of Erikson (1959) was used. A crisis was considered an event that, if dealt with in a maladjustive manner, could begin a movement toward eventual mental illness. On the other hand, if handled "properly", a crisis could present an opportunity leading to an increase in mental health and maturity.

Caplan (1964) felt that "the essential factor influencing the occurrence of crisis is an imbalance between the difficulty and importance of the problem and the

resources immediately available to deal with it" (p.39). The role of crisis resolution in the past was discussed as an influence affecting the present crisis outcome. Experience was central in the perception of the present situation as being "problematic or stressful". Clearly, a crisis could be either an opportunity for psychological growth or psychological deterioration. The outcome of a crisis depended upon the action taken during the period of disequilibrium.

In Caplan's view, the family could be either a help or hindrance to the individual experiencing a crisis; crisis was seen as a largely individual phenomena. Many of the variables and factors previously elaborated upon by other authors were incorporated and discussed by Caplan (1964).

Farber's Refined View. In 1964, Farber refined his approach to family crisis and emphasized the importance of the process aspects of the family and of crisis. "The process view emphasizes what action is to be taken to counteract a series of events over which the family members are concerned" (Farber, 1964, p.394).

Farber (1964) contrasted the process view with the stimulus-response model and judged the former to be superior in its application to the family. The stimulus-response (S-R) conception viewed the "crisis proneness" of a family as an indicator of the extent to which the responding family has crisis meeting resources. The S-R approach

sought to explain crises on the basis of reactions to classes of stimuli and considered adjustment reactions to be more or less unique (Farber, 1964). In the S-R model, the ways by which families meet critical events are not generally well conceptualized.

Farber (1964) perceived crisis as a situation that "induces a process in family life which is counter to the ordinary organization of the norms and values of the family members" (p.392). By considering a crisis in this manner it would eventually be possible to identify the distorting process initiated by the crisis and to "predict types of strategies developed by families to handle this new process" (Farber, 1964, p.393). The potential number of responses to crisis would be manageable for the researcher. Thus, a crisis initiates a new disruptive family process that leads to one of a small number of patterns of family reorganization. Knowledge of these patterns would assist in the choice of action to be taken to counteract the crisis.

The impact of family crisis as discussed by Farber (1964) was seen to center on the organization of the values of the family. The roles within a family would shift and disrupt the normal coalitions among family members. Families would not define the situation as problematic until after the coalitions had been affected. The "continuation of family life in the crisis situation is sustained through a rearrangement of age, sex, and generational roles in the family" (Farber, 1964, p.405). Eventually the basic

organization of the family would become deviant and an identified deviant member would often be "frozen-out" of the family. The end-product of this process was often the permanent institutionalization of the frozen-out member, permitting the rest of the family to return to a non-crisis existence. Farber illustrated the process using the example of a severely handicapped child.

Hill's Theory is Further Developed. Hansen and Hill (1964) published a major theoretical paper on the family under stress. The family-oriented aspects of crisis were elaborated upon, and Hill's theory detailed. A systems type of approach was used to analyze the family in crisis. Stressors were fully considered from community and individual perspectives. Families were also considered as a variable from a number of perspectives, and were categorized into types. Hansen and Hill (1964) pointed out that crisis research was, generally, simply descriptive, and they went on to discuss implications for future research.

Dow Studies Families in Crisis. Dow (1965, p.363) noted that "in spite of considerable research in family reaction to crisis, no general theory exists which can be applied to a wide range of crisis". Dow studied 58 families, each containing a disabled child, and found that, for many, the crisis was a generally disorganizing event.

Dow (1965) associated two basic family structures with the reaction to disability and institutionalization. "A structure founded on a small network of interactions and obligations" was associated with dysfunctional family responses "while one containing an extended network" proved to be functional and encouraged crisis resolution (Dow, 1965, p.365). These structures were thought to influence family reactions in all crisis situations. Additionally, the type of structure and the nature of the crisis would interact and prevent one structure from being uniformly associated with a functional response to crisis in all situations.

Grunebaum and Bryant Comment on Crisis. Grunebaum and Bryant (1966) concluded that the terminology in the crisis field was "unsettled". The authors used crisis in a generic sense "to refer both to the normal and unusual stress which necessitate specific tasks of interpersonal and intrapsychic readjustment" (Grunebaum and Bryant, 1966, p.151). "Each life crisis leads to a particular constellation of affects in any given family" (Grunebaum and Bryant, 1966, p.153).

Grunebaum and Bryant (1966) concluded that family studies was afflicted by premature theoretical closure and premature therapeutic enthusiasm. They noted that problems faced by family therapists are multicausal and that the balance of variables is too complicated to be explained by a single hypothesis.

An Operational Definition. Womble (1966, p.473) stated that

> A crisis may be operationally defined as an unexpected or undesired turn of events in which the persons most involved feel either extremely hard-pressed or incapable of solving the problems alone. Old patterns of behavior cease to be rewarding and new ones are needed immediately.

The seriousness of a crisis depends upon the number of solutions possible for the persons involved. The fewer solutions available, the more serious the crisis.

Womble (1966) discussed various family crisis situations and families' adjustments to them. He noted that a realistic attitude was required which would allow for the acceptance of the situation. A family could prepare for crises by being prepared for the unexpected and being integrated to function for the greatest benefit of all.

Darbonne Reviews Crisis. A fairly comprehensive review was made of crisis theory, practice, and research by Darbonne (1967). Lindemann's (1944) work was attributed to be the foundation for "crisis theory". The work of G. Caplan was emphasized and his definition of crisis utilized. Crisis was used to refer to a persons emotional reaction to the situation and not to the situation itself. Various crisis-related literature from the 50's and 60's was also reviewed.

Erikson's View of Development and Crisis. The contribution of E. Erikson to the area of human development is extensive. In his various works he has presented the view that life unfolds according to an epigenetic principle:

> Anything that grows has a ground plan, and that out of this ground plan the parts arise, each part having its time of special ascendancy, until all parts have arisen to form a functioning whole (Erikson, 1968, p.92).

Erikson's (1963) eight ages or stages were developed to represent the most critical periods of development. Each stage was associated with a potential crisis because it involved a radical change in perspective. Erikson used the term crisis in a developmental sense, "to connote not a threat of catastrophe, but a turning point, a crucial period of increased vulnerability and heightened potential" (Erikson, 1968, p.96). Crisis was therefore the "ontogenetic source of generational strength and maladjustment" (Erikson, 1968, p.96).

Erikson's veiw implied two basic types of crisis would exist. The first type would arise as a consequence of proceeding through the stages of life. Thus, normal, developmental, and anticipatable crises were associated with a "developmental ground plan". Depending upon where an individual was in the life cycle, characteristic types of crises could be predicted, and their impact understood in the context of normal development. The second type of crisis results from factors other than our development, and were

called accidental or unanticipatable. These crises could be seen (regardless of their source) to have properties generally comparable with those of developmental crises.

Langsley and Kaplan on Family Crisis Therapy. One of the first attempts to develop a family crisis therapy was made by Langsley and Kaplan (with others) in 1968. With an appreciation for the work of Erikson, life was conceptualized as a "series of crises, large and small", upon whose "management depends the outcome of growth or regression" (Langsley and Kaplan, 1968, p.2). It was pointed out that little attention has been paid to crisis psychology despite its importance in social psychology and psychiatry.

Crisis was defined by Langsley and Kaplan (1968) as the combination of hazardous events which precipitate an imbalance from the normal equilibrium as well as the individuals' reaction to these events. A situation is created that the individual cannot deal with using previously successful coping mechanisms. As crises usually occur in the context of a family, and because the symptoms of a member are in part an expression of family conflicts, the treatment unit was conceptualized as the whole family. When known, the "family factors which contribute to the intensity of a crisis, can be reversed to calm and resolve the crisis" (Langsley and Kaplan, 1968, p.174). By the use of out-patient family therapy, admissions to a psychiatric facility could be greatly reduced.

McGee's Continuum of Crisis. A continuum of crisis was suggested by McGee (1968) in order to facilitate the conceptualizing of crisis, and to indicate the probable need for intervention from mental health workers. Normal, developmental crises were considered as less likely to require immediate intervention, while crises such as the loss of a job or the death of a family member were placed at the upper end of the continuum (more likely to require intervention). Various points of view on crisis were considered, including those of the patient, the community, the therapist, and community agencies.

Robinson Reviews Crisis. As a contribution to the International Encyclopedia of the Social Sciences, Robinson (1968) reviewed and discussed the definition of the term crisis. He noted that "because of its varied meanings the term 'crisis' has not been useful in building 'systematic knowledge' about social phenomena" (Robinson, 1968, p.510).

Various uses of the term crisis were reviewed by Robinson, among them Wiener and Kahn's (1962) treatment of political-military escalation. Wiener and Kahn identified twelve generic dimensions of crisis, including the consideration of crisis as a turning point, the demand for action, the threat to the goals of those involved, the impact of the present situation on future behavior, a resultant new set of circumstances, uncertainty, reduction of control, and a rise in tension (Robinson, 1968).

Robinson (1968) noted that the dilemma facing most new concepts was that definitions advanced were either much too precise and specific (and hence not widely applicable) or were so unrestricted in meaning that, as was the case with crisis, it was difficult to distinguish a crisis from a non-crisis.

Robinson (1968) also noted that a general, subtle aversion to crisis has created a negative emotional association with the concept. A crisis was something to be avoided if at all possible. Robinson's review concluded with reference to the work of Erikson and Dabrowski and their view that positive effects may accrue from crisis.

Results of Conjoint Family Crisis Therapy. The year 1969 saw the publication of two studies headed by D. Langsley, originating from his family crisis project in Colorado. Langsley, Flomenhaft and Machotka (1969) reported that conjoint family crisis therapy (Langsley and Kaplan, 1968) could be used as a treatment in the mental health setting, as regression in patients often was precipitated by family or interactional tensions. The family was identified as a source of strength, support and aid in addition to its being the source of problems. Patients being admitted to a mental hospital were broken into two treatment groups. One group received family crisis therapy (out-patient), while the other received regular hospital treatment. A comparison revealed

that after six months the family crisis therapy group were functioning as well as their counterparts treated in the hospital. Family treatment was advocated as it is considerably less expensive than conventional treatment and seems to achieve equal results. Interestingly, neither treatment had an effect on long term maladaptive behavior.

A Scale of Crisis. Langsley, Pittman and Swank (1969) developed an instrument to help quantify the events leading to a crisis. The scale closely resembled one developed by Holmes and Rahe (1967), and in fact utilized the latter authors' intensity values. Hazardous events in family life (eg. serious household accident, marriage of family member, etc.) were identified and given numerical values. A distinction was made between the hazardous events and the means of coping with the problems. Scores were compiled reflecting both the hazardous event and the families' coping responses.

Langsley, et al (1969) then used the instrument to compare groups containing schizophrenic members and groups with no identified schizophrenics. It was found that the families containing a schizophrenic did not interact and would not confirm the validity of the patient's concerns. These families were convinced the illness was within the patient and thereby contributed to a general family pathology by not interacting.

The Therapeutic Induction of a Crisis. Two components of a family crisis were identified by S. Minuchin (1969); a dangerous situation and the opportunity for resolving it. Individuals (or systems) were seen to be forced to change in order to be able to cope with crisis situations. In family therapy, flexibility can be introduced in families and new functioning developed. To achieve this, however, therapy often had to "endure" upheavals by intervening in ways that "produce unstable situations which require change and the restructuring of family organization" (Minuchin, 1969, p.323). A case study of a diabetic child was used to illustrate the induction of a crisis in therapy. As a crisis was induced and experienced, the therapist directed the family to resolve conflicts. In this manner the family could effect change and become skilled at crisis resolution.

Conflict as a Vital Component of Family Life. In a somewhat novel approach to the family, Sprey (1969, p.699) concluded that "equilibrium or harmony is not necessary for the continuation or stability of families". Rather, an approach to the family based upon conflict, was suggested. In this view, the family "is an arena in which conflicting interests, and alliances of common purpose, contend" (Sprey, 1969, pp.702, 703). Family harmony was considered a problematic rather than a normal state of affairs. Conflict reinforced a family's solidarity, maintained a functional

division of labor and would "generally alleviate the boredom of too much marital consensus" (Sprey, 1969, p.700). Sprey does not define or elaborate his usage of the term "conflict", nor does he discuss crisis, although this author concludes that crises phenomena are being addressed.

The Last Decade

Eastham, Coates and Allodi Review Crisis. A major review of crisis was made by Eastham, Coates and Allodi (1970). Definitional imprecision and a lack of specificity were factors that were felt to contribute to the reluctance of workers in the crisis area to accepting and utilizing a single definition. Six usages of crisis were discussed, including organismic crisis (physiological stress), ego integrative, developmental, change in 'life space', communications models and, lastly, interpersonal and socio-cultural approaches.

Various features of crisis were elaborated upon by Eastham, et al (1970), and it was pointed out that a recurring theme in the area was the idea that a crisis proceeded through stages. Problems in usage were discussed, and included subjectivity, circularity, and past experiences. The authors concluded that the present ambiguity of the term should be preserved, and that the term be utilized by clinicians to refer to the total crisis process, giving it a sense of uniformity. For research purposes, a crisis would have to

be broken into "components selected and interrelated to do justice to the global concept" (Eastham, et al, 1970).

Family Crisis as Disequilibrium. Glasser and Glasser (1970) employed Hill's schema and defined a crisis as occurring when a stressor event produced a disequilibrium for the family. They pointed out that family stress was sometimes accompanied by psychological stress, but that this need not always be so. Thus, a subtle distinction was made between family crisis and its features, and the psychological crisis of individuals (perhaps an independent phenomena).

Glasser and Glasser (1970) concluded that a family crisis may not necessarily be a bad experience for a family, but rather could contribute to their sense of group satisfaction and introduce creative solutions which would raise the overall level of family functioning. Other articles on the family in crisis appear in this book of readings edited by the Glassers.

Taplin Reviews Crisis. Taplin (1971) reviewed two basic approaches to crisis: "homeostatic notions" and "psychoanalytic constructs", concluding that a third, "perceptual-learning" approach was superior. Taplin (1971) identified eight common crisis factors including the normalcy of crisis in the maturational process, the accessibility to intervention during a crisis, the effect upon future crisis

behavior, and the importance of the situation and the presence of identifiable precipitors to the crisis. The cognitive learning perspective could "handle" these points, and was presented as a suitable framework to utilize in the study of crisis.

Personality Growth Through Crisis. Dabrowski (1972) presented the position that crises disintegrate the existing personality structure and provide an opportunity for an individual to "reintegrate" his structure (and functioning) on a higher level than that previously in operation. In this case a developmental solution to the crisis would have been achieved. This view of crisis is a central component in Dabrowski's broad theory of psychological functioning and development (Dabrowski, 1964, 1967, 1972, 1977; Dabrowski, et al, 1970; Dabrowski and Piechowski, 1977).

In Dabrowski's model, personality development advances via disintegrations and subsequent reintegrations, most of which are precipitated by conflicts (stressor events) and which all lead to crises.

> Crises, in our view, are brought about through thousands of different internal and external conflicts, resulting from collisons of the developing personality (Dabrowski, 1972, p.245)

with its intra-psychic and external environments.

> A crisis is reflected in an acute disturbance which may take place as a result of an emotional hazard. Attempts at solution of such conflicts may result in the recovery of the former equilibrium, or in the formation of a more healthy condition of integration (Dabrowski, 1972, p.246).

Although Dabrowski's approach is oriented to the individual, he feels his theory and views are applicable to a consideration of families.[1] Dabrowski views crises as an inevitable and indeed necessary component for the development of an individual or family.

Family Conflict as Faulty Exchange. Scanzoni (1972) combined an exchange model of family functioning with the work of Sprey (1969, 1971) to yield the view that family conflict occurs as a result of faulty exchange. In this view, a thin line exists between exchange and conflict, the decisive element being power. Conflict would emerge when "in the course of ongoing reciprocities", a husband and wife "perceive they are being 'exploited by unfair demands'" (Scanzoni, 1972, p.71). Conflict would be resolved through a bargaining process that would make an issue equitable to both spouses. The relationship (if any) between the terms "crisis" and "conflict" was not elaborated upon.

Burr's Schema of Family Stress. Burr (1973) incorporated Hill's conceptual model into a broad theoretical construct of family stress. Propositions were developed that identified possible relationships between various variables. In developing propositions, Burr was attempting to stimulate

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[1] Personal communication, November, 1977.

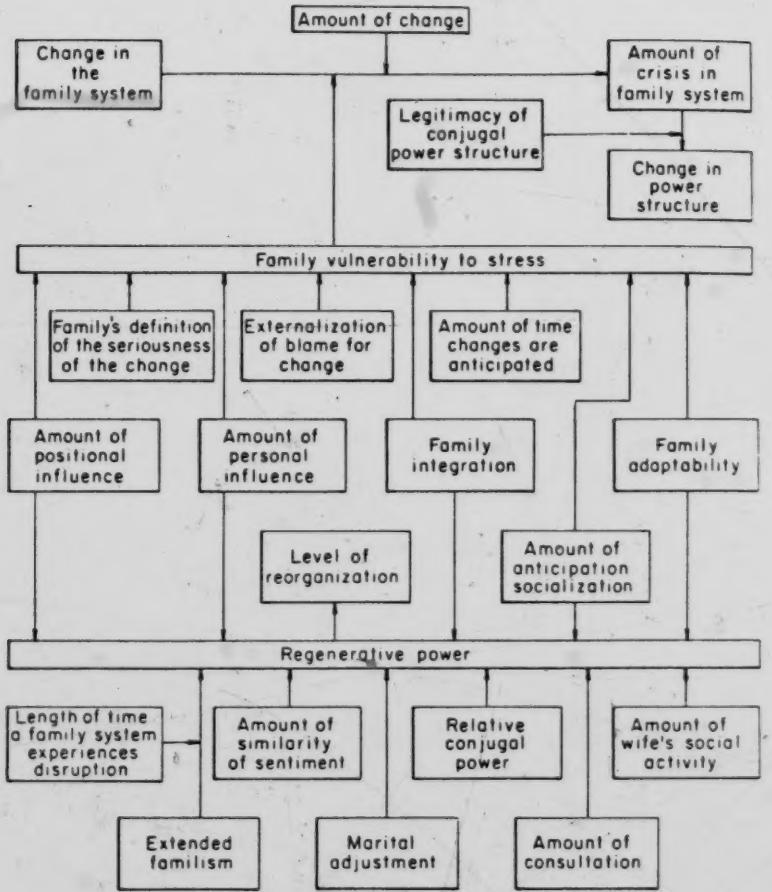
research that would eventually shed light on the appropriateness of the basic ideas involved in family stress. Propositions in turn were related to each other and a theoretical schema developed. This schema is presented in Figure 3, "Burr's Propositions About Families Under Stress" based upon Burr (1973, p.216).

Halpern Empirically Studies Crisis. Halpern (1973) developed a pencil and paper test designed "to measure those behaviors described as occurring during crisis" (Halpern, 1973, p.344). This measure tested "the validity of crisis theory" and the hypothesis that "crisis behavior would occur in individuals in crisis situations more significantly than in individuals in non-crisis situations" (Halpern, 1973, p.344). Sixty statements were rated by individuals in a crisis situation and by control groups. The crisis situations consisted of divorce, personal crisis, mental crisis and bereavement.

Halpern's (1973) results confirmed the hypothesis that individuals in crisis situations are significantly more likely to exhibit crisis-type behaviors than those individuals not in crisis situations. Halpern (1973, p.347) notes, "the fact that crisis behavior occurs significantly more frequently among people in crisis than in non-crisis situations, is basic to the development of the crisis model". Had the hypothesis not been confirmed, the crisis concept would have been "meaningless when applied to individuals".

FIGURE 3

BURR'S PROPOSITIONS ABOUT FAMILIES UNDER STRESS


Amount of change
Change in the family system
Amount of crisis in family system
Legitimacy of conjugal power structure
Change in power structure
Family vulnerability to stress
Family's definition of the seriousness of the change
Externalization of blame for change
Amount of time changes are anticipated
Amount of positional influence
Amount of personal influence
Family integration
Family adaptability
Level of reorganization
Amount of anticipation socialization
Regenerative power
Length of time a family system experiences disruption
Amount of similarity of sentiment
Relative conjugal power
Amount of wife's social activity
Extended familism
Marital adjustment
Amount of consultation

Halpern also hypothesized and confirmed that a person in a crisis situation is less defensive than those not in crisis. The K score on the Minnesota Multiphasic Personality Inventory was the index of defensiveness. This finding was interpreted to mean that, during a crisis, individuals are less defensive and therefore may be more open to help from outside agencies.

Crises as Psychiatric Emergencies. An attempt was made by F. Pittmann (1973) to define family crisis in relation to the treatment of psychiatric emergencies. Pittmann perceived that defining the "family systems crisis" was the central process in managing an acute breakdown. A crisis was defined as "the state of things in a system at a time when a change is impending" (Pittmann, 1973, p.270). A discussion of the phases of family crisis therapy noted that the crisis state was characterized by a disruption of usual family patterns, and by interruptions in and re-evaluation of the family's goals, values, and definition of itself. Boundaries loosen and normal roles may break down. A crisis can be resolved by defining the stressor (precipitating event), and by making appropriate changes in patterns and goals.

Monocchio Outlines Family Crisis. In a discussion of the family under stress, Monocchio (1975) indicated that all family crises involve suffering and pain. He further noted

that "it is what the family does with this that dictates the nature of the experience" (Monocchio, 1975, p.20). A family crisis forces each member to re-evaluate himself and the "meaning of his relationships with others". Each member is differentially affected by a family crisis and therefore responds uniquely to it. Crises can, and should, serve the family by promoting better communications among its members.

Divorce as an Opportunity for Growth. The potential opportunities for growth resulting from divorce were the subject of Wiseman's (1975) consideration. The stages of death and mourning developed by Kubler-Ross formed the basis for five stages in the normal process of divorce.

> Like any other of life's crises, it [divorce] is to be avoided when possible; when it occurs, it can be dealt with as a means of achieving growth toward a more satisfying way of life (Wiseman, 1975, p.212).

Crisis factors identified by Wiseman (1975) included the emotional crises individuals often experience, the opportunity for individuals to re-work previously unresolved crises, and the importance of flexibility, without which almost any stress could provoke a marital crisis.

Development and Crisis. Howes (1976) reviewed the epigenetic principle of Erikson and presented a fictional "ideal" family to illustrate the movement through various

life stages. Two case studies were used to support the contention that a natural, developmental crisis led to hospitalization only when a family deals with the crisis in an ineffective or pathological manner.

Crisis Theory. "Crisis theory" was described and illustrated by the case study of a family by Selig (1976).

> Crisis theory postulates that certain life events such as role transitions and deaths or separations of significant others, create hazards for meeting basic needs and, therefore, increase the probability of either interpersonal disturbances or new adaptions and increased functional capacity (Selig, 1976, p.291).

Crisis events render a family at risk and create the opportunity for deterioration, reintegration at the status quo level or reintegration at an enhanced level of functioning. The case study presented was an example of a crisis experience that ended in a growth producing experience for a family.

Silverman Classifies Crisis. Silverman (1977) defined crisis as "the interaction of a stress event and a perceived lack of resources either to overcome or to accommodate to it" (p.293). Stress was categorized into physical, environmental, social-environmental and personal types. Resources were categorized to include personality characteristics, the social network (family, friends), economic resources and political resources (membership in

organizations, etc.). Silverman felt that such a classification offered a more inclusive definition of crisis, inviting broader and more efficient interventions.

Baldwin Reviews Crisis Intervention. In a review of crisis intervention, Baldwin (1979, p.44) stated that "crisis theory must begin with the concept of homeostatic balance and the relationship of coping processes to stable psychological functioning". Phases of a crisis were summarized and included an emotionally hazardous event, an emotional crisis, crisis resolution (adaptive and maladaptive) and post-crisis resolution (adaptive and maladaptive). Ten corollaries of crisis were presented which summarize the various aspects of emotional crisis.

Baldwin (1979) noted that the classification of emotional crisis has been a gap in crisis theory and various schemas were reviewed. Six broad classes of crises were presented, each with its unique definition and intervention strategy. These classes included dispositional crises, anticipated life transitions, sudden traumatic stress, maturational/developmental, psychopathological crises and psychiatric emergencies.

Hansen and Johnson Reject the Term Crisis. Hansen and Johnson (1979) rejected the crisis concept as being too

restrictive in its focus. Burr's definition of crisis[1] was offered in support of the view that:

> The concept of crisis may be useful if we are interested only in those families that under stress fall into processes that are 'destructive' to family 'unity' (Hansen and Johnson, 1979, p.584).

Classification schemas of stress events were discussed as was the relationship between change and stress. Ambiguity, adaptability and relativity were discussed as they relate to the 'family stress theory'.

Synopsis of Review

Basic Viewpoints Identified

The review of literature has illustrated a number of issues central to the crisis area. These issues included the focus of study (individual vs. family), terminology used, basic theoretical approaches to crises and the role of crises in human affairs. A brief summary of these issues will be made, followed by a table, summarizing the major viewpoints expressed by the authors reviewed.

Much of the work on crisis has focused upon the individual (eg. Lindemann, 1944; Tyhurst, 1957; Forer, 1963; Erikson, 1968 and Halpern, 1973). Works on the family in crisis have often utilized this individually oriented material (Rapoport, 1963; Caplan, 1964; Howes, 1976). Major works focused upon the family in crisis have included

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[1] The "amount of disruptiveness, incapacitatedness or disorganization of the family" (Burr, 1973, p.200).

Koos (1946), Hill (1949), Farber (1960, 1964), Parad and Caplan (1960), Caplan (1961, 1964), and Burr (1973). Confusion between these levels of consideration appears to hamper theoretical work, and inhibits the development of family-oriented crisis features and phenomena.

The problem of terminology has been noted by a number of authors (Grunebaum and Bryant, 1966; Robinson, 1968; Halpern, 1973). While the majority of authors reviewed use the terms "crisis" or "family crisis", little consensus exists concerning what phenomena are being addressed by these terms. Some authors reject the term "crisis" for the term "stress". Stress-oriented material includes Burr (1973), Monocchio (1975), and Hansen and Johnson (1979). Conflict is referred to by Sprey (1969) and Scanzoni (1972). Attempts to differentiate between crisis and stress have had little impact on the literature (Rapoport, 1962). Unfortunately, the rationale for the selection of terminology is seldom elaborated upon.

Several theoretical approaches to crisis have been employed and have included psychoanalytic, systems theory, developmental, and exchange theory. Generally, approaches are implicit and their implications are not discussed with reference to the crisis phenomena. Approaches generally reflect the context of crisis (see above) and the area of study of the author, for example, psychologists such as Erikson (1968) and Dabrowski (1972) reflect the importance of the ego and personality. The lack of development of

conceptual approaches hampers full understanding of the crisis phenomena being addressed.

The review of literature illustrated that crises have a relatively flexible role in life and can be seen to lead to higher, lower, or the same level(s) of functioning (eg., Thomas, 1909; Tyhurst, 1957; Rapoport, 1962; Allport, 1963; Erikson, 1968; Dabrowski, 1972). The role of crises was generally related to the severity of the situation and the families' response to it. Successful resolution could result in higher levels of functioning and strengthen the family as a whole. The negative emotional association with crisis noted by Robinson (1968) was not observed in the review of literature. The specific features that each author emphasized are summarized in the following section.

Features Identified in Review

To assist the reader in compiling the information presented in the review of literature, a summary of the authors reviewed, their foci of study, and the major features identified in their work, will be made. This summary is presented in Table III.

The features identified in the review of literature (and summarized in Table III) were the basis for the development of the questionnaire utilized in the present study. Table VI (Chapter IV) presents the questionnaire items that were developed, and indicates the specific works

upon which each item was based. A contemporary formulation of a family crisis theory forms the basis of Chapter III, which follows.

TABLE III

SUMMARY OF REVIEW OF LITERATURE

Thomas (1909, individual)	- first major consideration of crisis - crises are significant experiences in life - the situation and its definition are important factors - crises disrupt habit and evoke attention - utilized concept of anticipatable crises - crises were a call for new action - crises can lead to growth - change implies loss of habit and disorganization
Mowrer (1927, family)	- discussed disorganization and disintegration of families - considered the family an "organic system" - employed systems-type concepts (eg., law of the aggregate)
Angell (1936, family)	- considered family types - reactions could be generalized to types - family change accommodated based upon degree of integration and flexibility
Lindemann (1944, individual)	- types of reaction to grief identified - found individuals exhibit common reactions - intervention found useful
Koos (1946, family)	- major study of family crisis - what family does in response to event crucial - crises create insecurity - crises block old patterns and require new ones

TABLE III CONTINUED

Hill (1949, family)	- major study of family crisis - considered hardship, resources, and family's definition of event - categorized crises - elaborated pathways crisis may follow - causes considered interrelated, complex - crises rupture relationships, force reorganization
Lindemann (1955, individual/family)	- study of bereavement reactions - hazardous situations create emotional stress - crisis when a situation is emotionally meaningful - crises create emotional disequilibrium - cause realignment of relationships - crises stimulate adaptive devices - persons very accessible to help during crisis
Tyhurst (1957, individual)	- crises are transitional states - crises are opportunities for growth - involve values, roles, and life image - phase of disturbance or turmoil - intervention can be significant
Hill (1958, family)	- considered family a closed system - elaborated the stressor event - listed eight general crisis factors
Farber (1960, family)	- crises involve the breakdown of patterns of conduct - values are an important feature - severity of situation and family's strategy are important factors

TABLE III CONTINUED

Kaplan and Mason (1960, individual)	- utilized term stress - stress is psychological disequilibrium
Parad and Caplan (1960, family)	- major work on family crisis - used homeostatic approach - crisis is a period of disequilibrium - crises have a peak (sudden turning point) - situation with no solution - creates feelings of helplessness - threatens life goals - awakens problems from past
Caplan (1961, family)	- crisis is a threat to goals - resolution in 4 to 6 weeks - produces disorganization - crises require new behavior to resolve
Rapoport (1962, family)	- differentiated stress and crisis - crises have both progressive and regressive outcomes - reawake old crises - breakdown in problem-solving methods - can affect mental health of individuals
Wiener and Kahn (1962, political focus)	- identified features of political crises - crises are turning points, demanding action - crises threaten goals - create uncertainty and reduce control - crises raise tension levels

TABLE III CONTINUED

Bloom (1963, individual)	- empirical study of definition of crisis - studied agreement among theoreticians on features of crises using fabricated case studies - two features found to define a crisis: a) knowable precipitating event b) resolution of one to two months (at least)
Cumming and Cumming (1963, individual)	- crises vital to ego growth - identified three classes of crisis - crises change ego organization - may result in same, higher or lower level of organization
Forer (1963, individual)	- crises are prerequisites for growth - used concept of crisis threshold
Miller and Iscoe (1963, review)	- reviewed crisis literature - found five crisis features: behavior change, time factor, subjective and relativistic aspects and tension
Rapoport (1963, family)	- crises are turning points - a normal and expected feature of development
Allport (1964, individual)	- situation of emotional or mental stress - force major changes in outlook in a short time - provided for progressive or regressive outcomes - normal and expected feature of development
Caplan (1964, family)	- emphasized Erikson's "life crises" concept - opportunity for growth or deterioration - severity related to resources available

TABLE III CONTINUED

Farber (1964, family)	- emphasized the process nature of crises - crises cause roles and relationships to be reorganized - crisis impact centered on values of family
Hansen and Hill (1964, family)	- major theoretical work on family crisis - systems-type approach emphasized stressors - elaborated family types
Dow (1965, family)	- noted no "crisis theory" exists - studied families in crisis - found a large network of interactions was valuable to crisis resolution
Grunebaumt and Bryant (1966, family)	- terminology in crisis area "unsettled" - crisis situations multi-causal and complex - "premature theoretical closure" seen in family studies area re: crises
Womble (1966, family)	- suggested "operational definition" - discussed various crises situations - persons feel incapable of solving problems alone - new patterns required for resolution - seriousness depends on number of solutions available
Darbonne (1967, review)	- reviewed crisis literature - considered crisis as a reaction to a situation
Erikson (1968, individual)	- critical periods of development - considered crises as turning points - discussed developmental crises - also considered "accidental crises"

TABLE III CONTINUED

Langsley and Kaplan (1968, family)	- utilized Erikson's viewpoint on crisis - developed a family crisis therapy program - based on an outpatient type of therapy
McGee (1968, individual)	- developed a continuum of crisis - considered the likelihood of intervention
Robinson (1968, review)	- noted the lack of an academic definition of crisis - noted a negative association with term crisis - lack of "rich deductive theory" involving crisis - crisis decisions involve uncertainty
Langsley, Flomenhaft, and Machotka (1969, family)	- elaborated a treatment based on crisis model
Langsley, Pittmann, and Swank (1969, family)	- developed instrument to quantify crisis events - assigned values to hazardous events - scores reflect event and families' responses
Minuchin (1969, family)	- crisis in the therapeutic setting - induce crises in therapy to teach resolution principles - crises force change
Sprey (1969, family)	- used term conflict - considered family harmony problematic - conflict alleviates boredom - conflict desirable feature
Eastham, Coates, and Allodi (1970, review)	- emphasized that crises proceed through stages - crisis concept should be considered globally - should retain present ambiguity of the term crisis

TABLE III CONTINUED

Glasser and Glasser (1970, family)	- differentiated individual and family crises - used Hill's approach to family crisis - crisis may not be a bad experience
Taplin (1971, review)	- reviewed psychoanalytic and stimulus-response approaches - adopted a perceptual-learning approach - emphasized normalcy of crises and identifiable precipitators
Dabrowski (1972, individual)	- crises vital to development of personality - acute disturbances lead to personality reorganization - can lead to higher or lower levels of functioning
Scanzoni (1972, family)	- used term conflict - conflict the result of faulty family exchange
Burr (1973, family)	- theoretical consideration of "families under stress" - developed propositions about family crises - integrated propositions into "fairly abstract theory" of family stress.
Halpern (1973, individual)	- tested crisis-behaviors - confirmed validity of crisis concept - found people less defensive during crisis
Pittmann (1973, family)	- family system approach - crises disrupt family patterns - discussed phases of crises - crises are times when a change is pending - involve goals, values, and definition of family

TABLE III CONTINUED

Monocchio (1975, family)	- used term family stress - stress involves suffering and pain - forces re-evaluation of self and relationship with family - what family does is crucial
Wiseman (1975, individual)	- crises are opportunities for growth - provide a second chance to resolve old crises
Howes (1976, family)	- presented two fictional case studies - illustrated Erikson's approach applied to a family
Selig (1976, family)	- discussed "crisis theory" - crises are opportunities for growth or deterioration
Silverman (1977, individual)	- classified crisis on basis of stressor events and resources - interaction of stressor and lack of resources leads to crisis
Baldwin (1979, review)	- review of crisis intervention literature - utilized concept of homeostatic balance - presented phases of crisis and six classes of crisis
Hansen and Johnson (1979, family)	- used term stress (reject crisis) - developed classification schema based upon stress events

CHAPTER III

A CONCEPTUAL FRAMEWORK OF FAMILY CRISIS

Introduction

In the preceding chapter, a number of features associated with the crisis phenomena were presented. Additionally, the absence of a cogent conceptual approach to the phenomena was illustrated. While "crisis theory" is referred to by several authors, a theory[1] per se would appear to be lacking, and the use of this term premature (eg., see Selig, 1976). Clearly, major efforts in the family crisis area are required at the conceptual and propositional levels.

Fortunately, a promising conceptual model of family crisis has recently been developed by Montgomery. Montgomery's model, which has been presently adopted as the "state of the art" conceptual approach available at the present time, will be presented in this chapter.

Montgomery's model is based upon two conceptual approaches to the family, namely, the systems approach, and the developmental approach. Each of these approaches will be discussed as they relate to family crisis. Montgomery's model will then be presented and used as the conceptual viewpoint in subsequent chapters.

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[1] For a review of this terminology see Phillips (1966)

The Application of General Systems Theory to Family Crisis

Introduction to General Systems Theory

General Systems Theory (G.S.T.) was developed by Bertalanffy (1955, 1956, 1968, 1974, 1975) as an approach to the study of the general laws and properties of systems. The theory utilizes a set of related definitions, assumptions and propositions, and attempts to classify systems on the basis of how their components are organized (related to one another). Ultimately, 'laws' of systems are derived relating to the typical patterns of behavior exhibited by given classes of systems.

The basic conceptual approach of G.S.T. includes several concepts which are particularly suited to the study of family crisis. These include the concept of hierarchy, and the levels of organization which comprise hierarchical structure. The concepts of interrelatedness, feedback, and G.S.T.'s emphasis upon both structural and process aspects, facilitate the understanding of family crisis.

The Family as an Open System

A basic system involves a number of individual components in some type of relationship with each other. A system has a boundary delineating it from the environment at large. A system will also have a characteristic structure and way of functioning that can only be understood by examining the system as a whole unit. This whole is qualitatively different from its parts. This quality compels

a multilevel approach which distinguishes between levels, and which allows for single level analysis.

As a system, the family has a unique character that can only be ascertained by a study of its wholeness. The family cannot be understood by simply knowing about each of its members. A component of this unique whole is the structure of the family. Family positions are identified, and a fairly stable structure is achieved.

A second component to the family's wholeness entails the relationships that unite family members. Generally, these relationships are founded upon emotional bonds and can take various forms. The basic character of these relationships cannot be understood unless they are observed over time. This time-oriented relationship aspect is referred to under the general heading of process. In sum, the family is a system having parts in relationship with each other, and exhibiting a characteristic structure and processes.

The family is a special type of system in that it selectively engages in a free exchange with the environment. This free exchange, occurring over the boundary that delineates system from non-system, is characteristic of open systems. Open systems have special properties that distinguish them from closed types and that allow for complex organization and reorganization.

Open systems are in a constant exchange with their environments but also exhibit basic long term steady state

periods. These steady states are characteristic of the open system and are distinct from the narrow equilibriums exhibited by closed systems (eg., of the thermodynamic type). They are also characteristic of the family, as most families spend most of their time in such steady states.

It should be noted that this steady state represents a basic balance between the system and the environment. This balance exists as a range within tolerance limits that allow a certain latitude for small change in the system. These limits may be known or unknown to the family, and can involve various aspects of family life (eg., goals, family's view of itself, values, etc.). These limits will also be involved in the system boundary that delineates the family from the environment.

When change occurs in one part of a system all system components must adjust to some degree. This is due to the parts being mutually involved. This concept can be illustrated by referring to the "interrelationship of causality" concept presented in Chapter II. This principle postulates that change occurs in a complex multi-causal fashion. Koos' principle of multi-causality is therefore very much a component of the systems approach.

Family Crises as a System Phenomena

Family crises involve a breakdown in the systems' steady state and necessitate the re-evaluation and reorganization of at least some of the systems' basic features.

Generally, the system adjusts itself and/or its limits, and re-establishes another steady state. Failure to establish this new steady state would preclude the continued existence of the old system.

In the systems conceptualization, family crisis refers to a process occurring over time. This process involves three distinct phases; a "pre-acute" phase, an "acute-non-steady-state" phase, and a reorganizational phase.

The pre-acute phase of crisis occurs during a steady state and begins when some aspect of the system fails to maintain the status quo balance of forces that characterize the steady state period. The upsetting of this balance can occur in various ways and has its source within or outside the family. Generally, the normal patterns or behaviors developed by the family become inappropriate to the situation or become ineffective in achieving their purpose. Once a deviation occurs in the steady state, feedback processes begin to operate, and the system can be conceptualized as being in a rudimentary crisis.

The deviation in the normal balance of forces (in the steady state) calls for prompt corrective action. If this action is successfully taken, then the crisis process will be halted and the family will continue to function and remain in a basic steady state. This scenario is played out frequently by all families.

If prompt corrective action is not taken, eventually all aspects of the system will be affected, and the deviation will become a significant feature in the overall system. The acute phase is entered when the steady state period breaks down (no longer exists), and the system becomes disorganized. When this occurs, the basic structure and processes of the family are affected, and various aspects of the family (its limits, goals, values, etc.) are either drawn into, or thrown out of focus.

Reorganization involves the re-establishment of a new steady state, and the adjustments of the system to this new state. This state may include the family unit (as it was), or may be a steady state based upon a re-defined family unit (as in separation).[1]

As can be appreciated, major change is facilitated during the disruption phase. Utilization of this opportunity to make conscious, desirable change is the basis for Dabrowski's approach (outlined above), and is the ideal "by-product" of many unavoidable crises.

Periodic phases of disruption are normal, expected features of the growing system. Iberall (1970) has illustrated the growth of a system as a series of "small, slow change" steady state periods, interspersed by "large, rapid change disruption periods".

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[1] This author believes that some families may remain chronically in the disruption phase. While this technically may represent a type of steady state, this situation will not presently be considered reorganization, but rather will be referred to as chronic disruption.

Structure and Process

Historically, structural aspects of the family have received the majority of study. These aspects are easily researched and are relatively open to observation. Process, on the other hand, has been much more difficult to study and has, until late, received relatively little attention.

Bertalanffy (1952, p.134) has formulated a broad conceptualization of structure which states that "what are called structures are slow processes of long duration, functions are quick processes of short duration". Thus in G.S.T., process is implicitly considered a type of structure existing over time. Due to the importance of process aspects in family functioning, this implicit treatment is inadequate for the consideration of family crisis. This necessitates the eventual consideration of the developmental approach, which explicitly considers process.

Systems theory suggests that change in process aspects will change structure and vice versa. The two are in a constant complex interaction which is somewhat tautologous. Structural change is process, and process is slow structural change. This interaction is characteristic of the systemic philosophy in that change in one aspect will of necessity affect the other.

As development occurs, structure will change and require or produce a corresponding change in process. Alternately, process aspects will evolve and require or produce adjustments in structure. This can be illustrated in a young married

couple (structure is a dyad) who decide to have a child (reproductive process initiated). A new process has been introduced into this system which will lead to a new structure (a triad). In turn, the new structure will require an adjustment of the process aspects previously functioning at the dyad level.

Feedback

A basic feature of all open systems is feedback. Feedback refers to that part of a system's output which is re-introduced into the system as input concerning its status. At the social level, feedback is complex and involves relationship dimensions, the goals of the system, and mechanisms for increasing or decreasing deviations from the status quo (or from a goal). Two basic types of feedback exist: positive and negative.

Positive feedback acts so as to amplify any deviations which may be present in a system. All deviations from the steady state are amplified, and in this sense, positive feedback acts to encourage systemic change. These changes can address various aspects of the system, including the system's goals, relationships between members, and/or the structure of the group.

The role of positive feedback can be seen in most family crisis situations. Small deviations from steady state are amplified by positive feedback. If appropriate action is not taken to reduce the deviation, positive feedback will continue

to amplify it until the steady state is disrupted. In this manner, positive feedback can be seen to contribute to the crisis process.

In some cases, change is needed and desirable, and the appropriate action may be to let positive feedback act freely. In these cases positive feedback would contribute to ultimate crisis resolution by encouraging the system to change itself.

Positive feedback can also act to prevent major crisis by encouraging small, frequent changes in a system. Families which meet the frequent demands for change with appropriate action achieve a slow, continual change within the basic steady state. Thus, positive feedback can help to minimize the probability of major disruption by encouraging numerous small adaptations.

In cases where disruption has occurred, positive feedback can act to ensure that all aspects of the "old" system which should be changed, are in fact changed. Thus, various aspects can be modified to allow for the establishment of an adequately functioning, reorganized system. It has recently been suggested that positive feedback serves in this manner "as a source of growth, innovation, and creativity in 'healthy' families" (Raush, Greif and Nugent, 1979, p.484).

Negative feedback acts to decrease deviations from the steady state, and works to maintain the status quo. Change of any type is mitigated, even necessary adaptive change.

Negative feedback, therefore, acts to encourage minimal or selective change in response to a crisis situation. For example, in the case of the first born, negative feedback often can be seen to support the continuance of the old pre-baby relationship structure. In the presence of the new physical structure, this incongruity will ultimately lead to a breakdown of the steady state, as outlined above.

In human systems, feedback messages may become partially or fully conscious, and may be influenced by the cognitive decision making process. The family may, in part, decide what response to make to a deviation message and thereby, in a sense, choose either negative or positive feedback. This author believes that the family's input to the feedback process has many implications in understanding the nature of the crisis phenomena and the family's role in crisis precipitation and resolution.[1]

The Multilevel Consideration of Family Crisis

The consideration of hierarchic order and the concept of levels can greatly assist in the study of family crisis. Distinguishing the group level from that of the individual allows for an increase in the specificity of analysis. A problem illustrated in Chapter II concerned the application

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[1] The exposition of these processes is beyond the scope of the present work, and will not be considered further.

of the term crisis to both individual and family situations. This problem is particularly evident when the levels of usage are either not clearly delineated or are altogether neglected, in which case personal and family crises are treated as one phenomena (eg., see Womble, 1966).

In the present usage, the group level is the family system. Supra-level systems include the neighborhood and the larger social groups to which the family belongs. Subsystems include individual members and various groupings of individual family members.

Family crisis is a phenomena affecting the group level. This implies that all members and their relationships with each other will be affected. The family crisis may also affect other levels as illustrated by a personal crisis (in a family member) occurring as a response to group level change. Relations of families to supra-levels and larger systems may also be affected, an example being employment disruptions. The multilevel approach facilitates the consideration of these various effects of family crisis and helps prevent inappropriate generalization across levels.

Summary of G.S.T. in Relation to Family Crisis

In summary, G.S.T. provides a fertile basic approach to the family crisis phenomena. As a system, the family and its features (including crises) are very well suited to this approach. The theory is rich in complexity and includes the

majority of concepts basic to the family (hierarchical organization, interrelatedness, etc.). In sum, the theory provides the basis of an excellent approach to family crisis.

As indicated above, one weakness of G.S.T. would appear to be its lack of emphasis upon the process aspects of systems. This complicates the consideration of family process, the major aspect of family life occuring over time. This weakness is reconciled by a consideration of the developmental approach.

The Application of the Family Developmental Framework to Family Crisis

The developmental approach will now be elaborated. This approach will take into account family process, and will assist in the conceptualization of family change. This approach, when combined with the basic systems views already presented, will lay the foundation for Montgomery's treatment of family crisis.

Introduction to Family Development

The Family Developmental Framework (F.D.F.) presents an approach which examines the longitudinal career of the family system, and attempts to account for changes in patterns of interaction which occur over the family's life span. Human conduct is understood in the context of the preceding and current social and individual milieus. In this manner, developmental aspects are intrinsically related

to everyday conduct. The central concept is the family life cycle, a concept encompassing the stage-wise, generalizable development of the family. An excellent summary of the approach appears in Hill and Rodgers (1964).

The Family Life Cycle

The family life cycle provides a time based categorization of families. This conceptualization deals directly with changing role patterns in the family over its life span, and emphasizes the concomitant consideration of family history (previous stages); the present situation (and its related processes), and the future (through anticipation of later stages, plans, goals, etc.). Table IV presents typical stages in the family life cycle (from Duvall, 1971, p.151). As can be seen by examining this table, each stage involves varying positions and certain developmental tasks. Transitions from one stage to the next often involve family members shifting from one position to another (eg., wife to mother). The family will normally move through these stages, facing and resolving the developmental tasks peculiar to each epoch.

If developmental tasks are successfully handled, the family will advance and find increased success with later tasks. Successful achievement of tasks will lead to a sense of satisfaction and happiness. Failure at a task will lead to unhappiness and difficulty in handling later tasks (Duvall, 1971). Rodgers (1973) indicates these tasks are

TABLE IV

DUVALL'S STAGE-CRITICAL FAMILY DEVELOPMENTAL TASKS

Stage of the family life cycle	*Positions in the family*	*Stage-critical family developmental tasks*
1. Married couple	Wife Husband	Establishing a mutually satisfying marriage Adjusting to pregnancy and the promise of parenthood Fitting into the kin network
2. Childbearing	Wife-mother Husband-father Infant daughter or son or both	Having, adjusting to, and encouraging the development of infants Establishing a satisfying home for both parents and infant(s)
3. Preschool-age	Wife-mother Husband-father Daughter-sister Son-brother	Adapting to the critical needs and interests of preschool children in stimulating, growth-promoting ways Coping with energy depletion and lack of privacy as parents
4. School-age	Wife-mother Husband-father Daughter-sister Son-brother	Fitting into the community of school-age families in constructive ways Encouraging children's educational achievement
5. Teenage	Wife-mother Husband-father Daughter-sister Son-brother	Balancing freedom with responsibility as teenagers mature and emancipate themselves Establishing postparental interests and careers as growing parents
6. Launching center	Wife-mother-grandmother Husband-father-grandfather Daughter-sister-aunt Son-brother-uncle	Releasing young adults into work, military service, college, marriage, etc., with appropriate rituals and assistance Maintaining a supportive home base
7. Middle-aged parents	Wife-mother-grandmother Husband-father-grandfather	Rebuilding the marriage relationship Maintaining kin ties with older and younger generations
8. Aging family members	Widow/widower Wife-mother-grandmother Husband-father-grandfather	Coping with bereavement and living alone Closing the family home or adapting it to aging Adjusting to retirement

basically role expectations arising at particular points in the career of a given position in the family. Family members (and society at large) apply pressure to each other to take on a certain role at a certain time. Thus, the wife must readjust to the position of mother. Failure to make this adjustment leads to a lack of integration and additional pressure. Success provides the basis for a "temporary equilibrium" until the next developmental task arises.

This approach can be used to identify crisis prone periods during the family life cycle. These periods occur when developmental tasks arise and stage transitions must be accomplished. Examples include establishing a satisfying dyad (adjusting to marriage), the first born, oldest child leaves home, etc.

Developmental Crises

Crises associated with the above transitions in the family life cycle are of a distinctive type. Generally, these crises can be considered in a positive context as they signal growth (transition). Crises in this context are considered a normal feature of development, and can be used as a means to achieving family growth. This author believes that the awareness of developmental aspects may allow the family to anticipate a crisis situation and avoid it, or at least prepare for it (and lessen its impact?). A good example of this is the preparation period during pregnancy,

allowing the couple to prepare for childbirth and anticipate their new family structure. Success at handling these situations facilitates the handling of future crises, and may also improve the family's ability to deal with unexpected crises (illness, death, accident, etc.) (Hill and others).

The Process View

Families and individuals change and develop in various ways according to the "living process from within" and stimulation from the social milieu (Hill and Hansen, 1960). Process refers to these changes and the various actions, operations and relationships of the family occurring over time.

As the family is dynamic, its processes and structure will exhibit gradual, continual change. Hill and Rodgers (1964, p.186) stated that the family developmental approach is unique in its "capacity to put its concepts to work over the natural history of family formation, expansion, contraction, and dissolution". Thus, the developmental approach deals with the entire family life span and can study process aspects at various points and over the life span in general.

Stages in the life cycle merge into one another imperceptibly and the impression of continuity is created (Hansen and Hill, 1964). Periodically, developmental tasks are faced, and breaks in this continuity are created. Crises

are associated with these breaks and are a normal feature of development through the stages of the life cycle. In effect, these crises provide a focus and motivation for the family to move into the next stage of family life. This movement would be accomplished by completing the associated developmental tasks.

The importance of processes in the developmental view is basic. The approach provides a framework within which processes associated with given stages can be microanalytically understood while more general life cycle processes can be macroanalytically considered.

Summary of the Family Developmental Framework

The developmental approach emphasizes the longitudinal consideration of the family through the concept of the family life cycle. This allows the development of families to be traced, and provides a means to deal with the process aspect of families. As indicated above, the process aspect is a weak concept in the systems approach, and cannot sufficiently account for family development. The process aspect is central to the developmental approach. Additionally, this approach presents a class of crises (developmental crises) which can now be delineated from other types (such as accidental crises).

Montgomery's Model of Family Crisis

The systems and developmental views have been briefly elaborated, and both approaches were found to have advantages in considering the family crisis phenomena. Additionally, it was seen that the approaches could be combined to increase their usefulness in family analysis. Montgomery's model represents a substantial application of this amalgamated approach to family crisis.

The Foundations of the Model

Montgomery utilized the systems and developmental approaches to deal with two fundamental questions. The first question, "Why is change in the family necessary?", is addressed by the developmental framework. The second, "Why do families change only with difficulty?", is approached using systems theory. The model represents a basic amalgamation of the two approaches outlined above. The basis of this amalgamation has been summarized by Montgomery into nine basic ideas which are presented in Table V.

Family Crisis as Process

In the Montgomery perspective, family crisis refers to decisive turning points in the family's course of action. By using this definition, Montgomery allows us "to see crisis as including positive as well as negative elements",

TABLE V

MONTGOMERY'S NINE BASIC IDEAS

1. The family is a number of people in interaction who consider themselves to be family members and different from those who are non-family.

2. The family is largely an open system in that it is affected by what takes place elsewhere in the larger social system.

3. A change in the family as a whole will change all parts of the family; a change in one part will tend to bring about a change in all parts.

4. The family's internal dynamics are the result of the particular family mix; no one person is the cause of any other person's behavior, for all generate the social context in which each person's behavior makes sense.

5. The family develops patterns of behavior over time and these patterns involve the interdependent family members in task related and integrative activities.

6. Changes take place in family members and in their patterns of interaction. These changes require that the family develop new and more appropriate patterns.

7. Patterns are difficult to change as family members try to retain patterns with which they are comfortable. The person who is dissatisfied in a family of satisfied people will find it difficult to generate change.

8. Problems which result from the necessity to change and the reluctance to do so are eventually resolved by the family's separation, the destruction of an individual, or the family's growth. All three of these involve confusion and may be associated with pain. A fourth alternative, the family's continued struggling without resolution of its difficulties, is also possible.

9. Although dealing with crisis is difficult for families it also has a brighter side. It is through the crisis experience that a family learns about itself. Through crisis, a family changes and moves to different and more appropriate patterns of behavior; a crisis is an opportunity for a family to build a satisfying future.

(p.26).[1] Crisis entails "a situation in which the inadequacy of some pattern is sharply indicated, and the family's course is changed" (p.26).

Montgomery's model breaks down the crisis process into four sequential periods. The first is a period of incipience, a time when an inappropriate pattern exists and is not being corrected. This period corresponds to the pre-acute phase mentioned above. During this period the steady state is functioning, but unbeknownst to the family, a change is forthcoming.

The second period incorporates the stressor, the event which forces the family members into awareness that something is wrong. This awareness causes the family to examine itself and come to terms with the inappropriateness (deviation). This period corresponds to the acute-non-steady state phase outlined above.

The third period is one of adjustment, when the family attempts to correct the faulty behavior. This period involves re-establishing various aspects of the steady state (eg., back to work, complete household tasks, etc.), and trial and error attempts to solve the problems that led to the stressor. Failure here will precipitate a further stressor and return the family to the non-steady state period

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[1] Page numbers following quotes refer to Montgomery, in preparation, unless otherwise noted.

of chaos. The adjustment period entails a slow "getting things working again" approach.

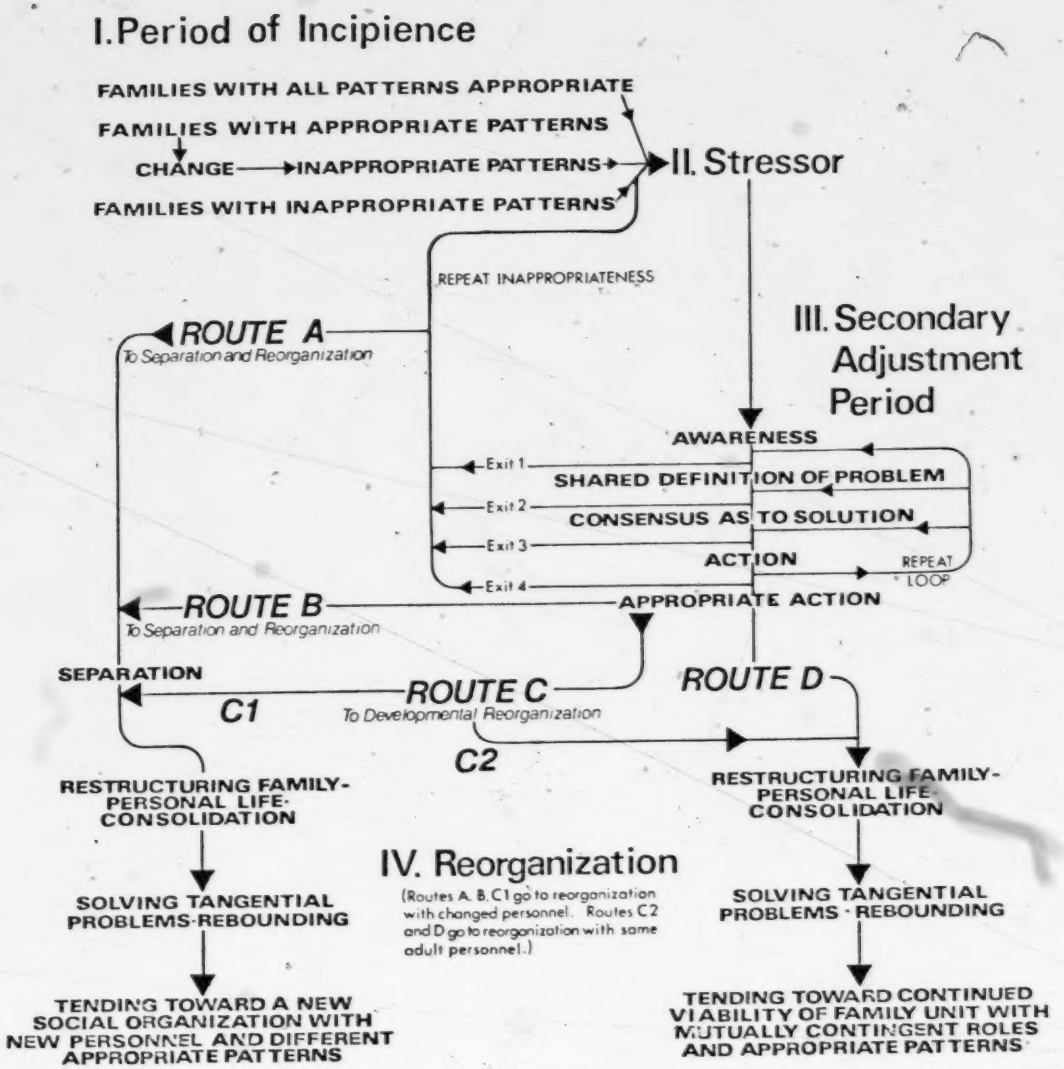
Lastly, a period of reorganization allows the system to accommodate the changes which have been made during the adjustment period. This reorganization may take one of two basic routes, namely, reorganizing the old family unit or separation of the old unit and subsequent restructuring. In the systems view elaborated above, the secondary adjustment period and the period of reorganization, together, constitute the reorganizational phase. This is due to the fact that during the secondary adjustment period semblences of the steady state return, and from the systems point of view reorganization is begun. The four periods are diagrammed in Figure 4.

The Period of Incipience

Various patterns characterize family functioning. These include role performance patterns, patterns of division of labor and decision making, and patterns of inactivity or ignorance (lack of awareness). These patterns function much like habit does for the individual. They are predictable and they provide security. During this period one or more of the family's patterns becomes inadequate and destructive to some aspect of the family unit. The traditional "tasks" of these processes are not completed and a stress is created. This may take place over a long

FIGURE 4

MONTGOMERY'S MODEL OF FAMILY CRISIS



period of time (months or years) and may not be noticed by the family. Or the family might notice the inadequacy and not take action to correct it.

Feedback plays a vital role during this period as positive feedback will act to amplify the inappropriate pattern. Negative feedback may also act to prevent the family from dealing with the inappropriate pattern effectively (eg., by ignoring its presence). If corrective action is not successful a stressor will eventually occur.

The Stressor

The stressor is a circumstance, happening, or situation "which forces at least one family member to be aware that inappropriateness exists in the family's current patterns" (p.55). This stressor can be generated from a number of sources, within or outside the family. The key aspect of the stressor lays in the perception by at least one member of the system that things are not right and that definite major change is required.

Stressors fall into two major categories: anticipatable and unanticipatable. The family dynamics resulting from each type are distinctive, as anticipatable stressors allow the family time to reach consensus as to what is going on, to formulate plans and, hopefully, to correct itself.

Unanticipatable stressors can occur in families whose patterns are all healthy and appropriate. This is often the

case in accidents or deaths which induce a family crisis. Regardless of its nature, the stressor changes the family's perceptions of itself and introduces the concept of the necessity for change.

Secondary Adjustment Period (S.A.P.)

The first step in this period involves attempts to reach a shared awareness of the problem, and to arrive at consensus concerning what the problem is (its definition and nature). When the family is agreed as to what the problem is, their next task is to reach agreement on the solution. This is a more difficult consensus than the one involving agreement on what the problem is (p.90). During these early steps in the S.A.P., one of the family members may volunteer or may be selected to lead the family toward eventual success (p.91). The presence of this sponsor promotes success in handling the crisis situation.

The action the family takes must solve the initial problem and be compatible with the system as a whole (and the various sub- and supra- levels involved). Thus the action must be compatible with the personalities of each member and with the community at large.

When a family arrives at the action step "and makes an attempt to change its patterns or behavior, it has taken a giant step" (p.96). If this action is not the total solution, the family has still succeeded in a major way.

Once an attempt has been made to reach a solution, it is much easier to go back to the consensus step and try to take appropriate action a second or third time.

A crucial feature in the above schema is the requirement that the whole family be involved in the consensus and action steps. Often this is complicated by the competing interests of members, and a lack of communication skills and trust between members. Trust and belief in the family unit, its importance and goals, greatly increase the likelihood of reaching consensus.

The action a family takes must correct the inappropriateness. This action can involve two basic routes. In the first route, the membership of the family remains intact. In the second route, the solution involves the separation of the family. The latter case may be the best overall solution to the inappropriateness and may therefore indicate high level problem-solving. If, however, the separation occurs before the consensus step has been reached, it cannot be considered an attempt at a solution.

Montgomery emphasizes the multilevel nature of the family and the role of the family's hierarchy of values. In his model, values and their related behaviors form a hierarchy of functioning. Crises will affect this hierarchy and require changes to be made in the family's values, and the behaviors used to express them. The more important the value that changes (the higher up the hierarchy), the more revision will be required in the system.

Montgomery also discusses the role of feedback in the family, and associates it with the concept of order of change (Watzlawick, et al, 1974). Negative feedback, reflected in behavior that tends to promote family stability, is called first order change. In this case, behavior changes at one level in such a way that higher level behaviors and values remain stable. Positive feedback promotes second order change, a change occurring when the structure or basic processes of the family are altered. Changes in relationship patterns, membership, or the family's basic values represent second order changes.

Reorganization

This period begins after major change has taken place in the family system. It is characterized by two behaviors that are vital to the final solution of the problem and the return to a fully functioning steady state. These behaviors are consolidation and rebounding.

To achieve a complete solution, the family must once again achieve pattern consistency. This consistency is lost during the stressor period and now must be re-introduced with a new pattern, formulated as the solution to the family's problem. Old patterns must change to allow the new behaviors to fit in. In short, the new must be consolidated with the old.

Rebounding is literally the task faced by the family of "bouncing back". To once again achieve a high level of integration, the family must deal with the problems created by their crisis process. As these tangential problems are solved, the family will achieve higher levels of certainty and assurance that the new system is viable.

Recapitulation of the Family Crisis Area

This chapter has outlined a promising framework of concepts concerning family crisis, and has hinted at some propositions concerning these concepts.[1] The above material has demonstrated that the basic concept of what constitutes a family crisis is a complex one. In the review of literature (Chapter II), it was seen that a wide range of features are used to define a crisis. In the current conceptual framework, crisis is a complex concept, having a number of possible causes and effects. Family crisis was conceptually considered as a process and broken down into four basic periods.

While Montgomery defines family crisis (see above) for the purposes of his model, general confusion characterizes the crisis field concerning the definition of family crisis. To address this confusion and sharpen this focus of Montgomery, a basic question will be addressed: What features

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[1] Montgomery has developed detailed propositions concerning each period in his conceptual model.

(or factors) may be used to define a family crisis? A satisfactory answer to this question would greatly facilitate research in the area and "pave the way" for the testing of propositions related to the above crisis model. The empirical component of the present work is designed to answer the above question. The methodology of the empirical component is presented in Chapter IV, following, and Chapter V presents the results of the study. Chapter VI will discuss the results of the present study in light of Montgomery's model, and will explore avenues of future research.

CHAPTER IV

METHODOLOGY

Introduction

This chapter will provide the framework for the empirical component of the present thesis. This author decided that the most economical approach to study the definition of family crisis was by the development of a questionnaire and the sampling of experts in the field. The rationale and development of this questionnaire will be detailed, and the nature of the sample discussed. The nature of the data (its form) and its analysis will also be presented.

The purpose of this component was to empirically study the features associated with the definition of family crisis. In Chapter II (above), a void of empirical studies was observed. The author views the absence of empirical studies as a highly undesirable feature in the crisis study area. Empirical insight addressing the question, "What features do engaged professionals associate with the crisis definition?", would contribute to the understanding of crisis by illustrating the actual working definition of the term as it is employed by professionals in the crisis area. This empirical study is also designed to help simplify the many diverse features which presently appear to be associated with the definition.

The Questionnaire

Rationale

The basic rationale of the present chapter was to derive an empirically generated appraisal of the features commonly associated with the definition of family crisis. Very little practical evaluation has been conducted on the many features associated with crisis phenomena.

The questionnaire format seemed most efficacious given the large number of features identified in Chapter II.[1] A questionnaire was economical in terms of time and money and allowed the sampling of a large number of individuals (many more than interviewing would permit). Using this format, the features identified could be presented to practitioners and rated as to their relevancy, re: the practitioners' definition of family crisis. The questionnaire format also facilitated the quantification of a large body of data.

In addition to the primary purpose of the questionnaire (evaluation of the twenty-six features), two other purposes were incorporated. First, demographic data was collected from the respondents in order to better understand the sample and to gain further insight into crises. This data related to aspects the author considered important in formulating a definition.[2] Second, the author considered

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1 - These features are summarized in Table III.
2 - These aspects are presented below.

it valuable to include an open-ended question, asking respondents to state their definition of family crisis in their own words. This information was collected to increase our understanding of the practitioners' definitions and to act as a basis for comparison with the features identified in the literature.

In order to address the above purposes the questionnaire was formulated in three parts, each entailing a distinctive type of analysis. These components will be explored in detail.

The Twenty-Six Features

The twenty-six features used in the questionnaire were derived from the review of literature presented in Chapter II. The features and the primary sources upon which they are based are presented in Table VI.[1] Direct quotations were avoided lest respondents identify sources and respond with an author bias. Items were chosen to reflect a broad sampling of the features commonly used to delineate or define a crisis. Twenty-six features were the minimum number required to sample the major features found in the literature. No conscious attempts were made to select features on the basis of their theoretical content; rather, the composition of the items reflects what was found in the literature.

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[1] The complete questionnaire is presented in Appendix B.

TABLE VI

THE TWENTY-SIX QUESTIONNAIRE ITEMS AND THEIR SOURCES

1. A crisis involves a situation (or problem) that has no immediate or apparent solution.
   Parad and Caplan, 1960; Womble, 1966
2. A crisis generally threatens the goals of a family.
   Parad and Caplan, 1960; Caplan, 1961; Wiener and Kahn, 1962; Pittmann, 1973
3. Crises often awaken old, unresolved family problems.
   Parad and Caplan, 1960; Caplan, 1961; Rapoport, 1972; Wiseman, 1975
4. A family crisis must involve some knowable triggering event or cause.
   Bloom, 1963; Taplin, 1971
5. In order to constitute a family crisis, a problematic event must take from one to two months (at least) to resolve.
   Caplan, 1961; Bloom, 1963
6. A crisis occurs only when the family has insufficient resources available to deal with a problematic situation.
   Parad and Caplan, 1960; Caplan, 1964; Womble, 1966; Silverman, 1977
7. A family crisis is a process occuring over time and can be seen to go through a predictable sequence or steps.
   Hill, 1958; Caplan, 1964; Farber, 1964; Eastham, Coates, and Allodi, 1970; Taplin, 1971
8. Family crises are characterized by significant increases in tension that occur rapidly (in a few hours or days).
   Parad and Caplan, 1960; Bloom, 1963
9. A family crisis involves change - a situation when change is pending or a response to changes.
   Minuchin, 1969; Burr, 1973; Pittmann, 1973
10. Crises disrupt and upset the normal habits and routine of families.
    Thomas, 1909; Hill, 1949; Waller, 1951; Pittmann, 1973
11. Family crises generally create a sense of personal insecurity in those involved.
    Koos, 1946 (see Waller, 1951); Hill, 1949
12. A crisis is a situation that calls for new actions or patterns.
    Thomas, 1909; Hill, 1949; Koos, 1946 (see Waller, 1951); Caplan, 1961; Womble, 1966
13. A crisis forces a reorganization of the family interaction pattern (pattern of relationships).
    Hill, 1949; Waller, 1951; Lindemann, 1957; Farber, 1960, 1964; Monocchio, 1975
14. A crisis characteristically calls a family's values into question.
    Tyhurst, 1957; Farber, 1964; Pittmann, 1973
*15. A crisis creates a state of disturbance, turmoil or upset for the family.
    Tyhurst, 1957; Dabrowski, 1972
16. A crisis is a turning point and can lead to a number of outcomes, both progressive and regressive for the family.
    Caplan, 1961, 1964; Rapoport, 1962; Wiener and Kahn, 1962; Rapoport, 1963; Erikson, 1968; Dabrowski, 1972

TABLE VI CONTINUED

17. The definition a family makes of a situation determines whether or not it can be considered a crisis.
Hill, 1949; Miller and Iscoe, 1963; McGee, 1968

*18. A crisis occurs when a family experiences unexpected events that disrupt family organization.
Womble, 1966

19. A crisis characteristically changes the family's view of itself.
Tyhurst, 1957; Cumming and Cumming, 1963; Allport, 1964; Pittmann, 1973; Howes, 1976

20. Crises are characterized by disorganization in the day to day running of families.
Caplan, 1961; Dow, 1965; Pittmann, 1973

*21. A crisis threatens the very existence of the family as a unit.
Hill, 1958

22. Many crises can be considered as maturational, reflecting the ongoing development of the family.
Rapoport, 1963; Allport, 1964; Caplan, 1964; Grunebaum and Bryant, 1966; McGee, 1968; Taplin, 1971; Dabrowski, 1972

23. Crises are characterized as times when a family can most benefit from help from outside agencies.
Lindemann, 1955; Tyhurst, 1957; Caplan, 1961; Darbonne, 1967; Taplin, 1971; Halpern, 1973; Pittmann, 1973

24. An event lasting a few hours or days (at most) cannot be legitimately called a family crisis.
Bloom, 1963

25. A crisis is characterized by a peak that is followed by a rapid drop in tension levels (in a matter of a few days).
Parad and Caplan, 1960

26. Family crises generally create a sense of helplessness in those involved.
Parad and Caplan, 1960

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* - feature in part based upon author's impression of the literature and the family crisis phenomena.

A five point scale was developed to quantify the view of the respondents with respect to each feature. Categories ranged from opposition to a feature (the feature is opposite to the respondents' definition) to the view that a feature was crucial to the respondents' definition. The five categories (as they appeared in the questionnaire) are presented below with the instructions the respondents received.

> Please indicate the degree to which you feel each of the following factors is involved in your working definition of "family crisis". Please utilize the following continuum for your responses:

1	2	3	4	5
(OPPOSED)	(NOT)	(SOMEWHAT)	(IMPORTANT)	(CRUCIAL)
Contrary to your view of family crisis	Not important; uninvolved in your definition	Somewhat involved in your definition	Important but not a crucial element in your definition	Crucial to your definition

The categories provide a continuum of responses that cover five of the possible views of a given feature. A space was provided to the left of each feature and respondents were asked to place the number of the appropriate category (one to five) in this space.

Demographic Information

A 'data sheet' was constructed to solicit pertinent information on the backgrounds of the respondents. This

data sheet is presented in Appendix C. Demographic information included the position of the subject, years of experience at the present or related position, age, sex, university training (degrees obtained), and the amount of contact with families in crisis (seldom, occasional, or frequent).

Respondents' Definitions

The definition of the respondent was solicited on the data sheet (see Appendix C) in order that it appear before the actual questionnaire features. This was to prevent the biasing of the solicited definition by the content of the questionnaire items. Subjects were asked to provide their "working definition" of family crisis, and six double spaced lines were provided for this purpose.

Sample

The sample used was selected randomly from a population of individuals certified to practice psychology in the Province of Alberta, and/or members of the Psychologists Association of Alberta.[1] Numbers were sequentially assigned to all individuals (totaling 884) on this combined mailing list, and 300 individuals were chosen at random (by the use of a table of random numbers). This population was chosen

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[1] The assistance of Dr. J. Browne in obtaining access to the population is greatly appreciated.

because it represented a good balance between academic training and experience in the family crisis area, while providing a relatively large population base.

The questionnaire was introduced to the sample by means of a covering letter, giving a brief description of the project. This letter appears as Appendix A. Subjects were mailed the questionnaire along with an addressed, stamped return envelope.

Data

In total, ninety-four questionnaires were returned (31.3 percent of the 300 mailed), of which eighty-nine were completed in full. Two contained data pertaining to the twenty-six features, but no demographic data. Therefore, analysis of the twenty-six features was conducted on ninety-one questionnaires while demographic analysis was conducted on eighty-nine. Three questionnaires were incorrectly filled out and were discarded (no analysis undertaken).

Data From the Twenty-Six Features

This component of the questionnaire represents an ordinal scale of measurement. Data consisted of twenty-six numerical entries per respondent, each ranging from the number one to the number five. This data was recorded on columnar paper and carefully checked before it was keypunched (by a contracted service) for computer processing.

Keypunching was done using the coding guide given in Appendix D. No data were missing from this portion of the questionnaire.

Demographic Data

Data on the demographic variables were of the ordinal type on education, experience, and contact with families in crisis, while the sex variable was nominal. Demographic data were assembled and keypunched according to the guide used above (see Appendix D).

Data From the Respondents' Definitions

Data in this portion of the questionnaire consisted of written statements made by the respondents. Eighty-six written replies were received (94.5 percent of the ninety-one usable replies). This information was typed onto file cards to be used in subsequent analysis.

Analysis of the Twenty-Six Features

The Factor Analysis Model

The basic research problem involves gaining insight into the features associated with the definition of family crisis. The research strategy is to have experts in the field rate the items in the questionnaire and then, through analysis, identify possible groups or categories of features. If present, such groupings (or factors) would

permit a reduction in the number of features associated with the definition. Factor analysis was chosen as it provides an approach to preliminary classification by grouping inter-dependent variables into descriptive categories (Rummel, 1970).

The Correlation Matrix

The data matrix was of the R-type, the columns of the matrix being the variables factor-analyzed (twenty-six), while the rows comprised the cases of data collected (ninety-one) (Rummel, 1970). This matrix was transformed into a twenty-six by twenty-six correlation matrix using Pearson product-moment correlations. As is customary, it was this matrix which was factored (Harman, 1960). Communality estimates were not employed, and the matrix was factored with unity values in the principle diagonal positions.

Factor Computation

Principle Factors Technique. The factor technique presently employed is a multiple factor analysis process involving the principle axes technique (principle components analysis). This technique was used as it is useful "to map the empirical concepts of a domain" and to "reduce data to a small set of independent variables" (Rummel, 1970, p.338). "The principle axes are the minimum orthogonal dimensions

required to linearly reproduce (define, generate, explain) the original data" (Rummel, 1970, p.338). In this solution, the mean of the principle axis is not standardized to zero, and the variance of the principle axis is the total variance that the axis accounts for. This analysis was conducted using a pre-programmed package entitled PA1 from the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, et al, 1975).

Variance. The variance of any given variable can be broken into a number of components. The basic division is between common and unique variance. Communality is a measure of the variance of a variable that is also common to other variables. That is, the variance of a variable accounted for by other variables. The unique variance is that variance of an item not common to other variables. Communality equals one (the total variance) minus the uniqueness measure. Additionally, variance consists of a reliable (reproducible) aspect and a random error portion.

The present analysis does not involve unique factors or the unique variance aspect. Further, this analysis simply defines the basic dimensions in the data, and the factor dimensions emerging "mix up common, specific, and random error variances" (Rummel, 1970, p.112). Thus, factors address the total variance of variables, and no assumptions can be made concerning the portions of common and unique variance.

Initial Factors. Initial factoring of the correlation matrix produces a number of factors generally equal to the number of variables (twenty-six in the present case). The first of these factors represents the linear combination of variables that accounts for more of the total variance in the data than any other combination (the best combination). The second component is defined as the second best combination of variables explaining the total variance in the data remaining after the removal of the first factor (and its associated variance accounted for). Factors are removed orthogonally to each other, thereby allowing each factor to address the residual variance left after removal of the preceding factor(s). The initial factors are, therefore, presented in order, in terms of the amount of variance each accounts for. The last factors listed account for trivial variance and are ignored in subsequent analysis. In order to achieve data reduction and still produce an identical matrix, the number of factors to be maintained must be carefully (but arbitrarily) chosen by the researcher.

Number of Factors Criterion

As implied above, the arbitrary decision concerning the number of factors to be chosen, is a vital one. The choice of too many factors will reduce the reproducibility of the study, as factors will be included that are accounting for trivial (random error) types of variances. Inclusion of too

few factors will prevent the reproduction of the matrix, the intent of the basic factor model.

The criteria for the selection of the number of factors in the present thesis was Cattell's scree test (1966). A scree plot was made for the twenty-six initial factors, and only those factors meeting the criteria (departing from the scree line) were included in subsequent factoring and considered as non-trivial. This plot will be presented in Chapter V.

Rotation

The unrotated factor matrix was rotated by varimax to produce a final rotated solution (Kaiser, 1958). This orthogonal rotation insures that factors will delineate independent variation. The basic purpose of the rotation is to simplify the interpretation of the factors by making as many column values as is possible as close to zero as is possible.

Analysis of the Demographic Data

Tabular Summary

The initial analysis of the demographic data consisted of the tabulation of demographic categories. These are presented as tabular summaries in Chapter V, the results chapter. This summary provides the frequencies and percentages of respondents for each of the demographic categories.

Analysis of Variance

In order to test for possible interrelationships between the factors extracted and the demographic variables, a one way analysis of variance (anova) was conducted. This anova consisted of the pre-programmed package contained in the Statistical Package for the Social Sciences (Nie, et al, 1975).

In this analysis, demographic variables were treated as the independent variables, and the factor scores were the dependent variables. A one way anova was carried out on each of sex, education, experience, and contact with families in crisis. Additionally, a one way anova was done on the "judgment of respondents' definitions" variable (see below). This analysis is designed to expose any relationships which the above demographic variables may have with the factors extracted.

Null Hypothesis. The null hypothesis for the present analysis states that the populations from which the samples are drawn have the same means. This hypothesis can be represented as:

$$H_o : \mu_1 = \mu_2 = \mu_K$$

This hypothesis will be tested at the .05 level of significance to determine if significant differences between the populations exist.

Analysis of the Respondents' Definitions

All of the definitions received are included in their entirety as Appendix F. To aid the reader, a breakdown was made of the basic elements contained within each definition. These elements extract the basic features from these definitions and are presented in tabular form in Chapter V, the results chapter.

Additionally, a judgment was made by the present author for each statement received. This judgment was designed to determine the respondents' basic orientation to family crisis. The judgment was based upon the outcomes implied by the definitions submitted, and served as a relative indicator of whether family crisis is perceived as a positive or a negative feature of family life. Three categories (of the nominal type) were utilized; 1) negative, reflecting only the various negative or 'harmful' consequences of crisis (no provision for positive aspects), 2) neutral, applying to those statements which do not contain enough information to imply a clear orientation, and 3) either, applying to definitions reflecting the possibility of either positive or negative consequences. This judgment was quantified according to the coding guide (see Appendix D), and was treated in the above analysis of variance as a demographic variable. The criteria for the judgments are elaborated in Appendix E. No category was included for "positive aspects only" as no definitions of this type were anticipated. The judged values appear after each definition in Appendix F.

Summary

This chapter has discussed the empirical strategy currently employed to study the features associated with the definition of family crisis. A questionnaire was developed and a sample of professionals surveyed. Factor analysis was used to search for factors or groupings of features which may be present in the data relating to the twenty-six features of family crisis. Analysis of variance was used to expose possible relationships between the factors extracted and the demographic variables. Lastly, the respondents' definitions were assigned a numerical value representing their basic orientation to family crisis. These definitions are also presented in an appendix to the present thesis, and their basic features summarized in tabular form in the results chapter. Chapter V, which follows, presents the results of the analysis.

CHAPTER V

RESULTS

This chapter presents an initial overview of the results, followed by the results of the factor analysis of the twenty-six features, and, by the results of the demographic analysis (anova, etc.). Lastly, the results obtained from the respondents' definitions will be presented.

Results indicate that the large number of the features associated with family crisis appear to be reducible to a few factors. Considerable insight was garnered concerning the relevancy of each item and the categorization (by factor analysis) of these features.[1] Additionally, a large amount of information was obtained concerning the respondents' definitions, and a demographic picture of the respondents was formed. Further discussion of the results will be the focus of Chapter VI.

Initial Findings

A tabulation of the relevancy values for each item is presented in Table VII. This table presents the frequency and percentage of responses in each of the five possible categories for each of the twenty-six features. Examination of this table reveals that a number of features appear to be highly associated with the respondents' view of family crisis

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[1] See Chapter VI

TABLE VII

FREQUENCY TABULATION (ITEM BY RELEVANCE)

	Response Category									
	ONE		TWO		THREE		FOUR		FIVE	
Item	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	9	9.89	17	18.68	24	26.37	22	24.18	19	20.88
2	5	5.49	10	10.99	23	25.27	30	32.97	23	25.27
3	0	0	19	20.88	31	34.07	37	40.66	4	4.4
4	7	7.69	22	24.18	25	27.47	18	19.78	19	20.88
5	37	40.66	39	42.86	7	7.69	7	7.69	1	1.1
6	22	24.18	24	26.37	14	15.38	12	13.19	19	20.88
7	11	10.99	21	23.08	27	29.67	23	25.27	9	9.89
8	3	3.3	12	13.19	22	24.18	31	34.07	23	25.27
9	1	1.1	8	8.79	26	28.57	22	24.18	34	37.36
10	2	2.2	4	4.4	9	9.89	34	37.36	42	46.15
11	0	0	1	1.1	14	15.38	34	37.36	42	46.15
12	2	2.2	5	5.49	15	16.48	28	30.77	41	45.05
13	0	0	7	7.69	22	24.18	33	36.26	29	31.87
14	0	0	14	15.38	25	27.47	32	35.16	20	21.98
15	0	0	1	1.1	5	5.49	28	30.77	57	62.64
16	0	0	2	2.2	12	13.19	29	31.87	48	52.75
17	3	3.3	9	9.89	19	20.88	22	24.18	38	41.76
18	6	6.59	12	13.19	23	25.27	33	36.26	17	18.68
19	4	4.4	24	26.37	34	37.36	24	26.37	5	5.49
20	3	3.3	19	20.88	33	36.26	25	27.47	11	10.99
21	11	10.99	14	15.38	20	21.98	22	24.18	24	26.37
22	6	6.59	15	16.48	21	23.08	37	40.66	12	13.19
23	9	9.89	16	17.58	30	32.97	21	23.08	15	16.48
24	54	59.34	17	18.68	7	7.69	6	6.59	7	7.69
25	24	26.37	33	36.26	26	28.57	4	4.4	4	4.4
26	3	3.3	7	7.69	37	40.66	23	25.27	21	23.08
Total	222	9.38	372	15.72	551	23.29	637	26.92	584	24.68

(categories four and five), in particular, items ten, eleven, fifteen, and sixteen. In addition to these items, items two, eight, nine, twelve, thirteen, fourteen, seventeen, eighteen, twenty-one, and twenty-two, have a combined response rate of over 50 percent in categories four and five. These items, therefore, would appear to be important features in the respondents' view of family crisis.

Items that do not appear to be involved in the respondents' definitions include numbers five, six, twenty-four, and twenty-five (combined response rate of over 50 percent in categories one and two). Examination of Table VII also reveals a number of items which exhibit a relatively normal distribution across the response categories. These items are numbers one, three, four, seven, nineteen, twenty, twenty-three, and twenty-six.

The following features (simplified from their questionnaire format) appear to be relevant to the respondents' definition of family crisis. The items are presented in order, beginning with the most frequently chosen items in categories four and five. The original questionnaire number of the item, and the percentage response rate in categories four and five, is presented after each feature.

1) involves a state of disturbance, turmoil or upset (15) (93.41%)

2) is a turning point, leading to progressive or regressive outcomes (16) (84.62%)

3) disruption and upset of habits and routine (10) (83.51%)

4) involves personal insecurity for those involved (11) (83.51%)

5) a situation that calls for new actions or patterns (12) (75.82%)

6) forces reorganization of family relationship structure (13) (68.13%)

7) families' definition determines a crisis (17) (65.94%)

8) involves change (change pending or response to change (9) (61.54%)

9) rapid increase in tension (8) (59.34%)

10) threat to goals (2) (58.24%)

11) calls values into question (14) (57.14%)

12) occurs when unexpected events disrupt organization (18) (54.94%)

13) can be considered maturational, reflecting family development (22) (53.85%)

14) threatens the existence of the family unit (21) (50.55%)

The following features were rated as having little relevance by the respondents:

1) A crisis must take from one to two months to resolve (5) (83.52%)

2) An event lasting a few days cannot be considered a family crisis (24) (78.02%)

3) Crises are characterized by a peak followed by a rapid drop in tension levels (25) (62.63%)

4) A crisis occurs only when insufficient resources are available to deal with a problem (6) (50.55%)

While the above synopsis provides an initial picture of the data, the basic question has yet to be addressed, "Do factors appear in the group of features?" Factor analysis did, in fact, reveal that factors were contained in the data.

Results of the Factor Analysis

The Scree Test

As outlined in Chapter IV, the scree test provides a criteria to aid in the determination of the number of factors present in the data. Initial factoring produces twenty-six (in this case) factors, many of which will be trivial (Rummel, 1970). The researcher must determine the number of non-trivial factors using the scree (or similar) criteria.

In the present analysis a scree graph was made of the eigenvalues of the initial twenty-six factors[1] (y-axis) vs. the twenty-six initial factors (x-axis). This plot appears in Figure 5. Examination of this plot indicates that the first six factors depart from the scree line and are, therefore, considered non-trivial. Thus, subsequent analysis was designed to yield a factorial solution producing six factors.

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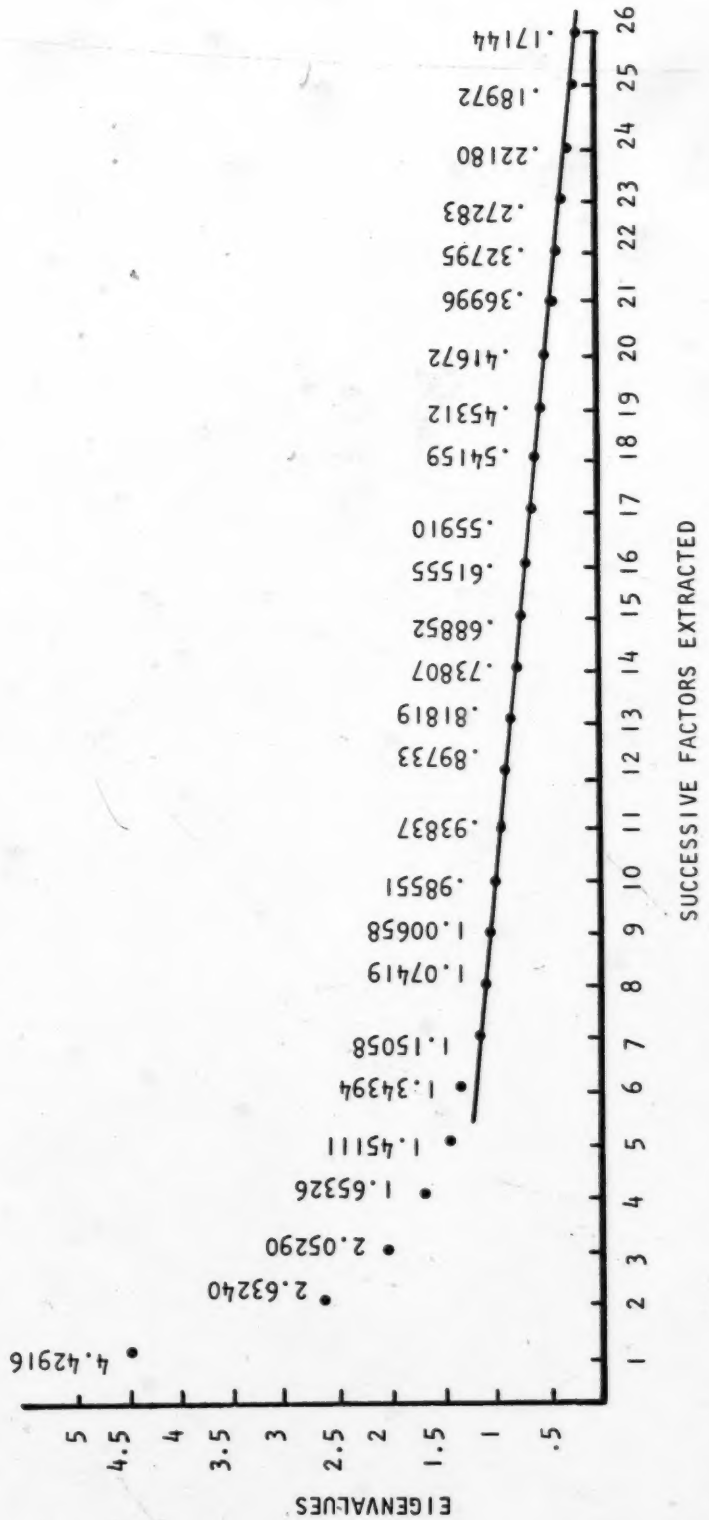
[1] See Table XIV. (The various factor matrixes and other tables associated with the data are presented in Appendix G. Only the most pertinent material was included in the text.)

FIGURE 5

THE SCREE PLOT



Factors Obtained

Interpretation of the factors obtained was based upon the final varimax rotated solution. This solution is presented in Table VIII. Items comprising factors were selected on the basis of an arbitrary factor loading cutoff of .5. Items loading at .5 or higher were considered components of a given factor.

Factor One. This factor includes six items: addressing the family's goals, values, view of itself, reorganization, and the necessity of new actions. This factor emphasizes the family's basic aspects and reflects the dynamic nature of the crisis phenomena. Crises appear to threaten goals, force reorganization, change the family's self-view and demand new action be taken.

Items comprising this factor:

2. "A crisis generally threatens the goals of a family". (.66678, 3.6[1])

12. "A crisis is a situation that calls for new actions or patterns". (.56737, 4.1)

13. "A crisis forces a reorganization of the family interaction pattern (pattern of relationships)". (.60521, 3.9)

14. "A crisis characteristically calls a family's values into question". (.63735, 3.6)

19. "A crisis characteristically changes the family's view of itself". (.67787, 3.0)

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[1] Each item is followed by its factor loading and its mean category assignment.

TABLE VIII

ROTATED FACTOR MATRIX

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
ITEM1	0.28470	-0.03337	0.56113	-0.18464	-0.01842	-0.02073
ITEM2	0.66678	0.08695	-0.03469	-0.17221	0.29422	-0.11701
ITEM3	0.10646	0.11453	-0.02323	0.44009	0.51129	-0.01309
ITEM4	-0.11398	0.17179	-0.03085	0.60176	0.02028	0.18237
ITEM5	0.22356	-0.02479	-0.09871	-0.10676	0.63243	0.36153
ITEM6	0.07215	-0.05095	0.25905	0.01007	0.18855	0.72328
ITEM7	0.11219	-0.03834	0.10624	0.45124	0.46661	0.08042
ITEM8	-0.12270	0.58936	-0.05201	-0.00302	-0.05204	-0.01573
ITEM9	0.23956	0.19389	-0.76633	0.08870	-0.07111	0.07427
ITEM10	0.14113	0.68887	-0.21376	-0.05123	0.22896	-0.04015
ITEM11	0.10145	0.49777	0.15287	0.16948	0.45716	-0.03046
ITEM12	0.56737	0.05465	-0.45245	0.16691	0.16818	0.10437
ITEM13	0.60521	0.17104	-0.17336	0.36226	0.17313	0.02543
ITEM14	0.63735	-0.01233	0.12297	0.34718	-0.05669	-0.33166
ITEM15	0.27518	0.39927	0.26547	0.34227	-0.26310	-0.05515
ITEM16	0.27292	0.00248	-0.16190	0.71291	0.00000	0.01410
ITEM17	-0.10857	-0.04449	-0.21462	0.17364	-0.15509	0.62724
ITEM18	0.11375	0.61233	-0.03979	0.12402	-0.07607	0.06043
ITEM19	0.67787	0.00588	-0.00033	0.12819	0.02350	0.06121
ITEM20	0.44537	0.44812	0.18479	-0.05665	0.18166	-0.00281
ITEM21	0.44903	0.10674	0.17363	0.08376	0.24072	-0.00269
ITEM22	0.14547	-0.19434	-0.40650	0.53590	-0.03059	-0.25583
ITEM23	0.44693	0.12577	0.14518	-0.15139	-0.17701	0.31809
ITEM24	0.12004	-0.14192	0.15397	-0.06211	0.67834	-0.18727
ITEM25	0.16284	0.52044	0.24488	-0.01884	-0.25354	-0.06126
ITEM26	0.15160	0.28516	0.67560	0.09740	0.24970	0.21185

Factor Two. Four items relating to tension and disruption contribute to this factor. Two items (10 and 18) emphasize the disruption of the normal family routine and organization, while the other two (8 and 25) indicate respectively, that tension rises rapidly and then, after a peak, tension levels drop rapidly.

Items comprising this factor:

8. "Family crises are characterized by significant increases in tension that occur rapidly (in a few hours or days)". (.58936, 3.6)

10. "Crises disrupt and upset the normal habits and routine of families". (.68887, 4.2)

18. "A crisis occurs when a family experiences unexpected events that disrupt family organization". (.61233, 3.5)

25. "A crisis is characterized by a peak that is followed by a rapid drop in tension levels (in a matter of a few days)". (.52044, 2.2)

Factor Three. The third factor involves three items; dealing with the change aspect of crisis, the sense of helplessness for those involved, and a problematic situation with no apparent or immediate solution.

Items comprising this factor:

1. "A crisis involves a situation (or problem) that has no immediate or apparent solution". (.56113, 3.3)

9. "A family crisis involves change - a situation when change is pending or a response to changes". (.76633, 3.9)

26. "Family crises generally create a sense of helplessness in those involved". (.67560, 3.6)

Factor Four. Three items constitute this factor and relate to a knowable cause and the turning point/maturational nature of crisis.

Items comprising this factor:

4. "A family crisis must involve some knowable triggering event or cause". (.60176, 3.2)

16. "A crisis is a turning point and can lead to a number of outcomes, both progressive and regressive for the family". (.71291, 4.4)

22. "Many crises can be considered as maturational, reflecting the ongoing development of the family". (.53590, 3.4)

Factor Five. Three items again make up this factor, two of which address a time related aspect. The third item considers the effect of crisis on unresolved problems.

Items comprising this factor:

3. "Crises often awaken old, unresolved family problems". (.51129, 3.3)

5. "In order to constitute a family crisis, a problematic event must take from one to two months (at least) to resolve". (.63243, 1.9)

24. "An event lasting a few hours or days (at most) cannot be legitimately called a family crisis". (.67834, 1.8)

Factor Six. This factor is made up of two items relating to the definition the family makes of the situation,

and the lack of resources available to deal with problematic situations.

Items comprising this factor:

6. "A crisis occurs only when the family has insufficient resources available to deal with a problematic situation". (.72328, 2.8)

17. "The definition a family makes of a situation determines whether or not it can be considered a crisis". (.62724, 3.9)

Six factors were obtained which appear to reflect meaningful categorizations of the features (as opposed to artifacts).[1] Further discussion of the themes and implications of these factors will be made in Chapter VI. The major features traditionally associated with crisis (disruption, tension, change, time aspects, etc.) are encompassed by these factors.

Results of the Demographic Analysis

Composition of Respondents

The demographic data is presented in Table IX. Inspection of this table reveals the frequencies (and percentages) of replies in each of the demographic categories. It should be noted that about 65 percent (59 of 91) of the responses are from males, while about 50 percent were from masters level individuals (male and female). About 40 percent

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[1] For discussions on the nature of factors, see Allport (1937), Royce (1963), Coan (1964).

TABLE IX

SUMMARY OF DEMOGRAPHIC DATA

Sex:	Male	59 (66.3%)*	Female	30 (33.7%)
Education:	PhD	30 (33.7%)	PhD	7 (7.9%)
	Masters	25 (28.0%)	Masters	20 (22.4%)
	Bachelors	4 (4.4%)	Bachelors	2 (2.2%)
Experience:	10 or More Years		10 or More Years	
	PhD	19 (21.3%)	PhD	4 (4.4%)
	Masters	8 (9.0%)	Masters	4 (4.4%)
	Bachelors	N/A**	Bachelors	N/A
	Less Than 10 Years		Less Than 10 Years	
	PhD	11 (12.4%)	PhD	3 (3.4%)
	Masters	17 (19.1%)	Masters	16 (18.0%)
	Bachelors	N/A	Bachelors	N/A
Contact:***	Seldom	22 (24.7%)		
	Occasional	37 (41.6%)		
	Frequent	30 (33.7%)		

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* Percentage of 89 cases reporting demographic information
** Bachelors individuals did not indicate experience
*** Both sexes reported together

held a PhD or equivalent degree. Experience figures indicate that 60 percent (54 of 91) of the replies came from persons with less than ten years of experience. Table VIII also shows that about 74 percent (67 of 91) of the respondents report occasional or frequent contact with families in crisis (40.7 percent, or 37 of 91 for occasional, and 33 percent, or 30 of 91 for frequent contact). Finally, it can be seen that 91 usable replies were received representing a response rate of 30.3 percent (91 of 300).

Results of the Analysis of Variance

Analysis of variance considered the six factors extracted above to be dependent variables while each demographic category constituted an independent variable. Analysis revealed three significant interactions, two being levels of experience and education. The third involved the judgment the author assigned to the respondents' definitions (see Chapter IV).[1] Results of the anova are summarized in Table X.

Examination of Table X reveals that there is a significant difference at the .05 level between the two experience levels (more than 10 years, and 10 or less) and factor six. Also significant at the .05 level was a difference between the definitional category (judgment made

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[1] Recall this variable was treated in the analysis as if it were a demographic variable.

TABLE X

SUMMARY OF ANALYSIS OF VARIANCE

Source	SSQ	df	MSQ	F
Factor 6 by Experience				
Between groups	5.2250	1	5.2250	.0222*
Within groups	83.7974	87	.9632	
Total	89.0224	88		
Factor 1 by Definition				
Between groups	6.9063	2	3.4532	.0348*
Within groups	81.9474	83	.9873	
Total	88.8538	85		
Factor 4 by Education				
Between groups	9.4672	2	4.7336	.0069**
Within groups	77.1184	86	.8967	
Total	86.5856	88		

* $P < .05$
** $P < .01$

by author) and factor one. Subtest analysis revealed this difference was between the "neutral" and "either" categories on this factor.

A difference between educational levels and factor four was found to be significant at the .01 level. Subtest revealed that this difference involved the PhD level and masters level groups, and factor four.

Null Hypothesis. The present null hypothesis, stating that the population means from which the groups are sampled are identical, is rejected. Differences in the population means have been found.

Results of the Analysis of the Respondents' Definitions

As each definition was received, a judgment was made as to its approach to the crisis phenomena, and a value assigned. A total of 86 definitions were offered and assigned ratings. These ratings appear after each definition, presented in Appendix F. A "negative" assignment was given to 53 of the 86 (58.2 percent), while 25 "neutral" assignments were made (27.5 percent). Eight "either" assignments were also given (8.8 percent). This finding confirms the suggestion by Robinson (1968) that professionals often have a negative bias toward the crisis phenomena.

In order to preserve the maximum amount of data, the definitions are presented in their entirety in Appendix F. In order to assist the reader in assimilating this information, Table XI presents a summary of the major features found in the definitions. While resources prevented further content analysis, these features will be discussed in Chapter VI as they relate to various aspects of the present work.

TABLE XI

MAJOR FEATURES OF RESPONDENTS' DEFINITIONS

Major Features	Number of Respondents' Definition**
family seeks or needs professional help	5, 12, 21, 28, 30, 33, 39, 56, 62, 63, 72, 73
family can't cope	13, 17, 24, 28, 30, 37, 47, 52, 59, 66, 68, 91
*interaction problems	15, 16, 19, 24, 27, 31, 36, 53, 70, 77, 86, 89
*problem family can't solve	8, 16, 20, 22, 25, 32, 67, 77, 78, 86, 88
*threat to unit or unity	6, 9, 23, 36, 40, 41, 48, 50, 63, 76, 82
*disturbance (related terms)	6, 26, 31, 33, 38, 45, 46, 55, 62, 71
state of stress	25, 34, 39, 47, 54, 69, 80, 88, 90
*involves change	2, 3, 18, 36, 71, 72, 74, 75, 79
*family defines crisis	1, 14, 26, 42, 65, 73, 88
communication problems	7, 33, 35, 46, 53, 77, 81
high/uncomfortable emotion	7, 44, 58, 79, 80, 86
family can't function	12, 17, 56, 66, 72, 89
breakdown in equilibrium/ homeostatis	21, 23, 30, 34, 87, 91
*general threat to family	13, 30, 34, 53, 74
contains dysfunctional members	11, 43, 49, 64
*for better or worse	2, 34, 90
*disrupt routine	21, 62, 86
breakdown/disintegration	10, 40, 47
maladaptive behavior	24, 54, 55
needs not being met	29, 43, 49
*high level or rapid tension	4, 17, 41
long-term situation	4, 63, 89
*process related	6, 20, 24

* feature included in present questionnaire
** entire definitions presented in Appendix VI.

CHAPTER VI

DISCUSSION

Introduction

This chapter will discuss the present study and elaborate upon its results. The results and conceptual approach presently adopted (Montgomery's Model) will be discussed, and recommendations for future research will be made. The discussion will sequentially answer the four basic questions posed in the introduction of this study.

Discussion of the Empirical Component

The empirical component of the present work was designed to address the question, "Can the large number of features presently associated with the definition of family crisis be reduced to a smaller number of factors?" On the basis of the present data, it appears that such a reduction can be made. This reduction is based upon two features of the results: the six factors extracted, and the hierarchy of features that was obtained.

The Six Factors

The questionnaire items can be grouped into six categories, each category containing all items related to a particular factor. The factors are comprised of various features which, together, determine the theme of each

category. These themes, which are still somewhat tentative, represent clear underlying dimensions of the family crisis phenomena.

The themes of the present factors reflect the majority of the dimensions previously associated with the crisis phenomena (eg., a disruption aspect, time dimension, etc.), and therefore confirm a basic congruity between the literature in the area and the practitioners view.

Factor one, the "general impact" factor, summarizes the impact that a crisis is perceived to have on the family unit. A crisis was seen by the respondents as a situation which threatens the family's goals, which questions its values, which calls for new action and new relationship patterns, and which changes the family's view of itself. The features comprising this factor were components of the works of: Koos, 1946; Tyhurst, 1957; Farber, 1960; Parad and Caplan, 1960; Caplan, 1961; Farber, 1964; Womble, 1966; Pittmann, 1973; and Monocchio, 1975. These features suggest that the effects of a crisis are far-reaching and may ultimately bring about change in basic family features (goals, values, relationship patterns, etc.). Family crises are major events in the life of the family.

Factor two contains items which relate to features of tension, and to the disruption of the normal family routine. This "disruption/tension" factor of crisis has previously been discussed in the work of: Tyhurst, 1957; Parad and Caplan, 1960; Caplan, 1961; Wiener and Kahn, 1962; Miller and

Iscoe, 1963; Allport, 1964; and Pittmann, 1973. The tensions associated with a family crisis were seen to peak in a matter of a few days and then gradually dissipate. Presumably, this dissipation of tension would occur as the family resolved the crisis and slowly re-established a normal routine.

It is noteworthy that questionnaire item number fifteen was not a component of this factor (or any other) as it directly related to the disruption aspect of crisis. It is not clear why this feature would not be included in this factor. The feature was a vitally important one to the respondents, and, as will be discussed below, was the feature most consistently associated with defining a crisis.

Factor three contains items which indicate the unresolvability of the situation, the aspect of change involved, and the feelings of helplessness which appear to accompany a crisis. This "unsolvable situation" factor would appear to differentiate a family problem from a family crisis, the former having some solution available and not involving the magnitude of change generally associated with a family crisis. The features of this factor previously appeared in the work of: Parad and Caplan, 1961; Womble, 1966; and Pittmann, 1973.

The "turning point" factor was the fourth extracted from the data. The theme of this factor implies that crises are turning-point periods, and can be either developmental or regressive to a given family. Definite triggering events

are also an aspect of this factor, again confirming the importance of an unambiguous and known stressor event (Bloom, 1963). The turning-point approach was previously emphasized by: Thomas, 1909; Tyhurst, 1957; Wiener and Kahn, 1962; Rapoport, 1963; Erikson, 1968; Taplin, 1971; and Dabrowski, 1972.

Factor five addresses the time-line involved in family crises and suggests that crises reawaken unresolved problems from the past. This "time-line" factor confirms that a chronological aspect is involved in defining a crisis situation (Parad and Caplan, 1960; Caplan, 1961; and Bloom, 1963).

Questionnaire item number seven, which relates directly to the process "nature of crisis", was not a component of this (or any other) factor. It is not clear why this finding was observed, as this feature would appear to conceptually relate to the theme of the time-line factor.

Factor six suggests that the crisis-meeting resources available to the family, and the family's definition of the situation, affect the judgment of a crisis. This "subjective aspect" factor may account (in part) for the observance of a wide variety of reactions to what appear to be similar crisis situations. Subjective components have historically been stressed by: Hill, 1949; Miller and Iscoe, 1963; Caplan, 1964; and Pittmann, 1973.

In summary, six factors relating to the defining of a family crisis were extracted, and crisis themes for each factor were presented. These factors strengthen our understanding of the basic crisis process and the features which may be used to define it. If confirmed in future research, these factors would contribute to theoretical efforts in the crisis area and suggest avenues of future research (eg., exploration of each factor in various settings).

To maximize the analytical power of the present work, the factors can be viewed in conjunction with the hierarchy of features obtained. The implications of this combined view will be discussed after the hierarchy of features is examined.

The Hierarchy of Features

When the questionnaire features are arranged in the order of their perceived importance to the definition of family crisis, a hierarchy of family crisis features is produced. This hierarchy, which is presented in Chapter V, arranges the features on the basis of the respondents' ratings of each feature. Features are listed in descending order, the first being the most consistently associated with the definition. An arbitrary cutoff was chosen (50% or higher combined response rate in categories four and five), and fourteen features were found to comprise the hierarchy.

On the basis of this hierarchy, we may say, with some degree of confidence, that each of the fourteen features is consistent with defining an event as a family crisis. Naturally, the most confidence would be placed in the features achieving the highest ratings, as compared to those features comprising the lower positions of the hierarchy. We therefore have a listing of features associated with the presence of a family crisis, and a relative scale (their hierarchical position) of their perceived importance. The identification of a constellation of these features could be used to confirm the presence of a family crisis, and a check-list for this purpose is presented below.

The hierarchy therefore can be used to help define the presence of a crisis situation and to assist a counselor in searching out "trouble spots". Using the hierarchy as an information gathering device would help the counselor understand the severity of the crisis and may suggest intervention strategies. The hierarchy could also be used in research in the crisis area and eventually facilitate the development of a sound, comprehensive theoretical definition of family crisis.

It is noteworthy that of the hierarchy of associated features, three do not appear in any factor. These are: feature one (item number fifteen) relating to disturbance of the family; feature four (item number eleven) relating to insecurity produced by a crisis; and feature fourteen

(item number twenty-one), which states that a crisis threatens the family unit. The author considers it possible that these features were considered to be redundant. Their content is very similar to several features which were components of various factors.

A number of features (all components of various factors) were not considered to be important to the definition of a family crisis or opposed to it. Items rejected by the respondents were numbers five, six, twenty-four, and twenty-five. The implication based upon the rejection of these features is that crises may be short-lived phenomena (lasting days or weeks until resolution) which may occur in families who appear to have sufficient resources to deal with the given situation. The rejection of item number twenty-five was interpreted to mean that tension levels may fall gradually. On this basis, crises appear to exhibit characteristic rapid tension buildups which peak (stressor) and then gradually subside, presumably as the crisis is resolved.

The ratings associated with a number of items were judged to be ambiguous and did not fall either into the group of rejected features or into the hierarchy of associated features. These items were numbers: one, three, four, seven, nineteen, twenty, twenty-three, and twenty-six. Of these, item number seven (family crisis as process), item number twenty (disorganization in the day-to-day

routine), and item number twenty-three (family can most benefit from help) were also not included in any factors.

This finding is somewhat puzzling, as the content of these features appears to address the crisis themes presently discussed. We must, however, conclude that the respondents did not consider these features as appropriate components of a definition of family crisis. The author suggests that these items may have been perceived as too nebulous to be considered helpful in defining a crisis. These features may also have been considered redundant and therefore not rated highly.

The Definition of Family Crisis

A comprehensive definition of family crisis has been formulated, based upon the themes of the six factors, and the content of the features of the hierarchy presented above. A family crisis may be defined as a turning point for the family that is characterized by disturbance and turmoil, and which upsets the normal family routine. The crisis creates feelings of helplessness as the family's values, goals, and view of itself are challenged. The situation appears to have no available solution and clearly requires major change (in the form of new actions and patterns of functioning) to resolve.

The six factors can be used independently to define or assess a crisis situation. In this capacity, the themes of

the factors would summarize the major processes taking place in a family crisis situation. In synopsis, these factors are:

1. The general impact factor which summarizes the family crisis as a threat to goals; a questioning of values; a call for new action; and a change in the family's view of itself.

2. The disruption/tension factor which implies that tension levels rise quickly, disrupting the normal family routine, peak, and then gradually dissipate.

3. The unsolvable situation factor relates to the lack of a perceived solution available; the helpless feelings this creates; and the perceived need for change in the situation.

4. The turning point factor emphasizes the presence of a known triggering event and the possible maturational aspects of a crisis. Both regressive and progressive outcomes are considered possible, depending upon how the family handles the situation.

5. The time-line factor relates to the perceived importance of the time-related aspect of the situation.

6. The subjective aspect factor relates to the definition the family makes of the situation, and their perception of the resources available to them.

The identification of the above themes, or some combination of them, would be highly suggestive of the presence of a family crisis. A counselor may, therefore, investigate these themes with families to help assess the situation vis-a-vis family crisis.

The hierarchy of features can also be directly applied to defining a family crisis. In this capacity the hierarchy of features may be considered as a checklist type of

definition of family crisis. A checklist of features (in their relative order of importance) would permit the rapid quantification of the family crisis situation. Such a checklist follows:

1. The presence of disturbance, turmoil, or upset.
2. A breakdown of the habits and routine of the family.
3. The presence of high levels of insecurity for those involved.
4. The perceived need for new action or behavior to rectify the situation.
5. The clear need for a reorganization of the family relationship structure.
6. The family's perception that it is experiencing a crisis.
7. The perception of the family that major change is needed to restore normalcy.
8. Rapid increases, or high levels, of tension.
9. The perception of the family that its basic values and goals may require examination and/or revision.
10. The presence of a known, unexpected event which has been deemed responsible for disruption.

The checklist presented is based upon the hierarchy of features presently obtained. The presence of a number of these features would clearly define a family crisis situation.

Discussion of the Conceptual Aspects

The second primary focus of the present study related to the conceptual status of family crisis, and was addressed by the question, "What is the present state of conceptualization in the family crisis area, and how do the present results relate to this aspect?" A historical context of the concept was provided by the review of literature. This review revealed that conceptual work has been hampered by problems in terminology and definition. Crisis materials oriented toward the individual are often incorporated into family theories of crisis, and a uniquely family-oriented crisis theory is lacking. To resolve this state of affairs, Montgomery's model was presented. This model represents a contemporary analysis which, while grounded upon proven concepts (eg., a stepwise breakdown), significantly demystifies many of the enigmas of family crisis.

Montgomery's model also provides several unique contributions to the area of crisis study. The development of the period of incipience has helped reveal the very early stages of crisis production. Previous crisis material avoided the pre-stressor period and concentrated primarily upon the effects of the stressor. Indeed, most previous material (eg., Hill's work) assumed that the stressor was the initial feature of the crisis.

Montgomery also explicated the steps which were required of the family to resolve the situation. These steps,

outlined in the secondary adjustment period, point out the systems nature of family crisis, and the systems type of actions needed to resolve it (eg., shared awareness, consensus, etc.).

Montgomery utilized a turning point view of crisis and provided for a number of alternate routes of resolution. Given appropriate action the family may resolve the crisis either by staying intact or by separating. Both routes could be considered developmental reorganization. On the other hand, the family may be unsuccessful at resolution and continue in a crisis cycle. This cycle would entail a stressor, unsuccessful action, repeated inappropriateness, and subsequently another stressor.

The systems and developmental aspects of the model can be seen to capture the major essences of family crisis. These essences are the complex multilevel and multi-dimensional effects of a crisis, and the dynamic nature of the phenomena. The two theoretical approaches meld in Montgomery's model to produce a highly efficient conceptual approach to the family crisis phenomena.

Montgomery's model would benefit from refinements in its definition of family crisis; a single, comprehensive, explicit definition reflecting the model's approach is needed. Additionally, various features associated with the secondary adjustment period appear to require refinement. The family's values, the impact of the psychological state of its members

(especially security aspects), and the family's feelings of helplessness as a group need further elaboration.

An integration of the present model with the definition of family crisis offered above, produces a powerful analytic approach. Counselors and family theoreticians can now assess both the important features of a crisis situation and the period or stage of crisis (eg., stressor, S.A.P., etc.). This permits a sharpening of the therapeutic role and sensitizes researchers to many crisis-related family variables.

A detailed theoretical examination of the relationship between individual psychological phenomena, and the psychology of the family, is ultimately needed to fully come to grips with the family crisis phenomena. How does the personal insecurity of the family's members translate into the group's perception of the situation and possible action? When its members, and subsequently the family as a group, experience helpless feelings, does a "family depression" result? If so, how does such a depression affect the secondary adjustment period and crisis resolution? The answers to these and similar questions await sophisticated theoretical efforts to understand family systems psychology and its relationship to the psychology of its members.

In conclusion, Montgomery's model has provided a satisfying theoretical framework for the present thesis. This framework represents the current status of the family

crisis concept and offers a context within which to view the results of the present work. While the study was not intended as a test of the model, the results are compatible with the basic features and orientation of Montgomery. This compatibility, and the ease with which the model incorporates various crisis features, supports further investigation of family crisis using Montgomery's perspective.

Discussion of the Respondents' Definitions

The third question posed in the introduction of the present work was, "Do the definitions collected from the practitioners reflect the features presently identified in the literature?" Generally, the content of the respondents' definitions do reflect the features obtained in the survey of the literature. There was considerable variability in the actual definitions offered, but a fairly high degree of agreement was observed on basic concepts. Table XI in Chapter V summarized these basic concepts and the definitions that contained them.

A general orientation emphasizing the family's inability to cope with a situation emerged. This orientation emphasized the family's need for professional help, a threat to the family unit, the presence of interactional problems, disturbance (or turmoil) and stress, and the aspect of change.

The author was surprised by the responses received in terms of their magnitude and the attention paid to detail.

Clearly, a well planned and major content analysis was needed to deal with this information. As such analysis was not included in the present work, all of the information has been provided the reader in Appendix F.

It can be seen that the views of family crisis held by the practitioners are diverse and cannot be seen to reflect a given school of thought or approach. Views on what constitutes a crisis literally ranged from "anything" to "nothing" and all points in between. A number of the respondents' views not included in the present questionnaire features included: the family's need for professional help, communication problems, the family's needs not being met, the presence of maladaptive behavior, high or uncomfortable levels of emotion, and the presence of a dysfunctional member.

In conclusion, the basic views of the respondents generally reflected the features of the questionnaire and were consistent with the results of the present study. The respondents' views represented a rich source of information and contained a number of idiosyncratic features not generally found in the literature. The diversity of the definitions received emphasizes the variability encountered in reading crisis materials, and underscores the need for a uniform understanding of the definition.

The Role of Demographic Variables

The fourth, and final question raised in the introduction asked, "Can a relationship be ascertained between various demographic variables (experience, education, etc.) and the ratings of the definitional features?" Analysis revealed that there was a relationship between several demographic variables and the factors presently extracted.

The most significant interaction (at the .01 level) occurred between educational levels (PhD vs. Masters) and factor four (turning point). An interaction was also found between experience levels (more than ten years vs. less than ten years) and factor six (subjective aspect). This interaction was significant at the .05 level. Also significant at the .05 level was the interaction between the definitional judgment of the respondents' definitions (made by the author) and factor one (general impact factor).

The interactions presently found are difficult to interpret. The author suspected that the practitioners' view of family crisis might change with either higher educational experience, more office experience, or high levels of contact with families in crisis. Obviously, the educational and experience levels of the practitioner play a role in his perception of the factors of family crisis. Before consistent interactional relationships can be fully revealed, further study will be needed. The present study has

demonstrated the involvement of the education and experience variables, and strongly recommends future research examine these variables.

The definitional judgment presently assigned to each of the respondents' definitions was designed to ascertain the basic orientation to family crisis held by the practitioner.[1] Judgments were difficult, and perhaps questionable, due to the fact that many definitions did not sufficiently describe the role played by crisis in family life ("either" or "negative"). Given the limitations of this aspect of the present investigation, interpretation of the interaction between the definitional variable and factor one (general impact factor) is very tenuous.

Hindsight suggests that the role of crisis should have been explored utilizing a more direct approach. An explicit question would have removed the interpretative aspect currently present, and facilitated interpretation of the results obtained.

Recommendations

This study is consistent with previous crisis study in that it raises more questions than it answers. Given this, numerous recommendations for both theory development and research follow.

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[1] See Appendix E for criteria of judgments.

Future crisis study along the present lines would further isolate the factors of the definition of crisis. Study designed to explore the factors presently revealed would sharpen the factors' theme and may further reduce the number of features needed to define a family crisis. Correlational or factor analytic study of the same population (or of a similar population) using a refined questionnaire, therefore, seems highly warranted. Future study should further explore the role of education and experience, and be explicitly designed to explore the perceived role of crises.

The definition of family crisis presently suggested, and the hierarchy of features obtained, would form the basis of an interesting follow-up study. Again using a Likert scale rating, how well does this definition represent family crisis? Ask respondents to rank the features of the hierarchy and compare this ranking with the present results. A great deal of research therefore can be generated on the basis of the present findings.

Future theoretical efforts in family crisis should attempt to theoretically incorporate the results presently obtained. More theoretical attention should be given to the meaning and role of crisis, and all crisis-related theoretical efforts should clearly present the definition being addressed.

Conclusion

A definition of family crisis has been arrived at on the basis of an empirically derived hierarchy of features and six family crisis factors. This definition illustrates that the family crisis concept is a complex one which requires a number of factors and features to define. It has also been demonstrated that the number of features needed to define a crisis is reducible, and that some consensus exists on what these features are. The present definition is tentative in the sense that future research will be required to articulate its factors and assess its overall appropriateness.

Montgomery's model of family crisis was presented and its systems-developmental approach was concluded to be both representative of contemporary crisis theory and satisfying in its analytic power.

The present work has contributed to the achievement of a definition of family crisis acceptable to both researchers and theoreticians. The eventual elaboration and adoption of a comprehensive definition will greatly enhance family crisis understanding.

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Appendix A

Letter of Introduction

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FACULTY OF HOME ECONOMICS
THE UNIVERSITY OF ALBERTA • EDMONTON, CANADA • T6G 2M8

We are conducting a study of the definition of family crisis. A literature survey has been conducted of various theoretical definitions; however, no insight is available to indicate the definitions actually used in crisis counselling situations. It is our goal to study the relationship between theoretical formulations and the formulations that are used in a day to day counselling type environment.

The Psychologists Association of Alberta has granted its permission to draw a random sample of its members. In order to maintain a representative sample, we encourage you to complete the enclosed brief questionnaire. Your responses will shed insight into the actual working definitions of family crisis, as well as into the relationship between working and theoretical definitions. All data are completely confidential.

If you desire a copy of the results of the study, please indicate your name and address on the form provided. This sheet will be kept separate from your answers to ensure your anonymity.

Thank you in advance for completing this questionnaire. We hope that it has been interesting and that it may act as an impetus to your future thoughts on family crisis. If you desire further information about the study, please contact me at 432-5771.

Sincerely,

Mr. W. Tillier
M.Sc. Candidate
Division of Family Studies
University of Alberta

Jason Montgomery, Ph.D.
Associate Professor
Division of Family Studies
University of Alberta

Appendix B

The Questionnaire Items

The questionnaire and its instructions.

Instructions:

Please indicate the degree to which you feel each of the following factors is involved in your working definition of "family crisis". Please utilize the following continuum for your responses:

1	2	3	4	5
(OPPOSED)	(NOT)	(SOMEWHAT)	(IMPORTANT)	(CRUCIAL)
Contrary to your view of family crisis	Not important; uninvolved in your definition	Somewhat involved in your definition	Important but not a crucial element in your definition	Crucial to your definition
1	2	3	4	5

Degree Involved (Indicate #)

_____ 1. A crisis involves a situation (or problem) that has no immediate or apparent solution.

_____ 2. A crisis generally threatens the goals of a family.

_____ 3. Crises often awaken old, unresolved family problems

_____ 4. A family crisis must involve some knowable triggering event or cause.

_____ 5. In order to constitute a family crisis, a problematic event must take from one to two months (at least) to resolve.

_____ 6. A crisis occurs only when the family has insufficient resources available to deal with a problematic situation.

_____ 7. A family crisis is a process occuring over time and can be seen to go through a predictable sequence or steps.

_____ 8. Family crises are characterized by significant increases in tension that occur rapidly (in a few hours or days).

_____ 9. A family crisis involves change - a situation when change is pending or a response to changes.

_____ 10. Crises disrupt and upset the normal habits and routine of families.

_____ 11. Family crises generally create a sense of personal insecurity in those involved.

_____ 12. A crisis is a situation that calls for new actions or patterns.

_____ 13. A crisis forces a reorganization of the family interaction pattern (pattern of relationships).

(over)

1	2	3	4	5
(OPPOSED)	(NOT)	(SOMEWHAT)	(IMPORTANT)	(CRUCIAL)
Contrary to your view of family crisis	Not important; uninvolved in your definition	Somewhat involved in your definition	Important but not a crucial element in your definition	Crucial to your definition
1	2	3	4	5

Degree Involved
(Indicate #)

_____ 14. A crisis characteristically calls a family's values into question.

_____ 15. A crisis creates a state of disturbance, turmoil or upset for the family.

_____ 16. A crisis is a turning point and can lead to a number of outcomes, both progressive and regressive for the family.

_____ 17. The definition a family makes of a situation determines whether or not it can be considered a crisis.

_____ 18. A crisis occurs when a family experiences unexpected events that disrupt family organization.

_____ 19. A crisis characteristically changes the family's view of itself.

_____ 20. Crises are characterized by disorganization in the day to day running of families.

_____ 21. A crisis threatens the very existence of the family as a unit.

_____ 22. Many crises can be considered as maturational, reflecting the ongoing development of the family.

_____ 23. Crises are characterized as times when a family can most benefit from help from outside agencies.

_____ 24. An event lasting a few hours or days (at most) cannot be legitimately called a family crisis.

_____ 25. A crisis is characterized by a peak that is followed by a rapid drop in tension levels (in a matter of a few days).

_____ 26. Family crises generally create a sense of helplessness in those involved.

Appendix C

Data Sheet

DATA SHEET

Please state your working definition of family crisis.

_____

_____

_____

_____

_____

_____

Your position: _____ Age: _____ Sex: _____

University Degrees/
Training: Degree University

_____

_____

_____

_____

_____

Using your definition of family crisis, please indicate the degree of involvement in your practice with families in crisis.

_____ frequent
_____ occasional
_____ seldom

Years experience at present or related position: _____

Appendix D

Coding (Keypunching) Guide

1 to 26 - Questionnaire Variables

1. (Opposed) - "Contrary to your view of family crisis".
2. (Not) - "Not Important; uninvolved in your definition".
3. (Somewhat) - "Somewhat involved in your definition".
4. (Important) - "Important but not a crucial element in your definition".
5. (Crucial) - "Crucial to your definition".

Demographic Variables

Sex	0	- No Data
	1	- Male
	2	- Female
Education	0	- No Data
	1	- PhD or equivalent
	2	- Masters
	3	- Bachelors
Experience	0	- No Data
	1	- 10 or more years
	2	- less than 10 years
Contact	0	- No Data
	1	- Seldom
	2	- Occasional
	3	- Frequent
Definition	0	- No Data
	1	- Negative
	2	- Neutral
	3	- Either

Column Assignment[1]

Columns 1, 2	reply number
Columns 3-28	questionnaire variable
Columns 29-33	demographic variable

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[1] This information pertains to Table XVIII.

Appendix E

Criteria for Judgment of Written Definitions

Negative: (1)

Definitions were judged to be negative if the dissolution of the family unit was implied or if crises appear to create only conditions involving stress, or producing harmful consequences. Situations perceived as threatening, harmful or hurtful to members or families were included in this category, as were disruptions in communications, behavior and day-to-day functioning. The inability to meet the needs of members and unhappiness were also included. No mention of positive aspects or potential growthful outcomes.

Neutral: (2)

If the implication for the future of the family was not clearly implicit in the definition. Neither positive nor negative outcomes can be implied. Included in this category were "unable to cope" type definitions if there was no elaboration.

Either: (3)

If the definition provided for the possibility of responses allowing the family to stay together and learn/grow/mature from their experiences in addition to the possibility of negative family break-up outcomes. That is, either positive or negative outcomes can follow a crisis.

Appendix F

Definitions Received From Respondents

This appendix presents the definitions received from the respondents (unedited). Each definition is followed by its assigned judgment of orientation, based upon the criteria presented in Appendix E.

1. "A crisis is any situation that the principals determine to be a crisis. Interestingly, the principals do not always find that a crisis is debilitating in terms of other behaviors". (2)

2. "Family crisis - a critical stage in the functioning of the family unit (however defined) when the trend of future events, whether better or worse, is about to be determined. Usually surrounded by instability, followed by a decisive change, whether positive or negative". (3)

3. "Family crisis is defined as a situation in the family which presents elements, whether instrumental or affective, so different from the ordinary family system that the family members are forced to change in order to cope with the family crisis". (2)

4. "A situation of long standing which suddenly culminates into an unbearable, 'cannot stand it anymore' feeling or a sudden unexpected occurrence with shattering effects". (1)

5. "A family seeking help from an agency or helping profession for a family problem and/or a family referred for help because of apparent problems if that family then accepts an intervention or has some intervention such as apprehension of a child forced upon it". (2)

6. "Any disturbance of a person or persons in which the family dynamics are clearly involved as antecedants and/or a disturbance which threatens to break up the family". (1)

7. "Periods when family members experience increased levels of emotion causing further conflict, communication problems and thereby more increased emotion (a self-feeding cycle)". (2)

8. "A problem which a given family cannot solve without rending the integrity of the family structure". (1)

9. "A crisis involves an event which threatens the unity and the day to day functioning of the family". (1)

10. "Crises cover a spectrum from 'hot to cool'. At the cool end are minor crises like a quarrel. At the 'hot' end are what we usually consider a crisis -- a breakdown disintegration of whatever structure or system the family has been operating on whether healthy or ill". (1)

11. "Any situation in which one or more family members (usually an 'identified patient') are undergoing psychiatric problems which affect, or are affected by, one or more other family members. There may or may not be a clear-cut precipitant". (1)

12. "Unable to function properly as a social unit and therefore requiring intervention, substantial support or treatment". (1)

13. "A family crisis involves a real or imagined internal or external threat to the nuclear units regular pattern of stress coping behaviors, resource sharing, norms and values, which is perceived by one or more members of the unit as raising decision paths that may ultimately lead to a post-trammatic decay or dissolution of the membership". (1)

14. "Anything a member of the family calls 'a crisis'". (2)

15. "A situation of family crisis arises when one or more members of the family find it difficult to get along with others". (2)

16. "A family situation in which 2 or more people reach seemingly insoluble impasses and in which the parties involved attempt to overpower each other, or to use tactics that are hurtful -- provoking feelings of resentment and of resistance". (1)

17. "A situation so disruptive that the usual coping mechanisms of the family break down and the rhythms and patterns by which that family has maintained itself and defined its uniqueness are no longer functional. In other words, all hell breaks loose!" (1)

18. "A situation involving 'to be expected' change points in the family life cycle (pregnancy - empty nest, etc.) or 'unexpected' points (divorce - tragic death - delinquency, etc.) which requires the family to function in non-habituated fashion". (2)

19. "Serious breakdown or blocking of interpersonal, family-system relationship patterns". (2)

20. "Any physical event or social/psychological process which the family perceives itself as being incapable of handling with its own resources". (1)

21. "A break in habituation/homeostasis whereby one or more family members experiences sufficient distress to merit or request outside intervention". (1)

22. "A situation in which a family experiences problems which they find impossible/nearly impossible to handle". (2)

23. "An occasion threatening the equilibrium state of the family - usually an event or external threat, which can rearrange the family's structure (eg., in terms of power organization) is the precipitant". (1)

24. "A family crisis is an event to which one or more members of a family respond with a maladaptive or no coping response(s) which maladaption leads to inter-actional and/or structural stress involving more than one family member. There are stages of crises and crisis resolution". (1)

25. "The state of stress, felt by a majority of family members, which comes about as a result of a lack of solutions to a perceived problem or problems arising in the family". (1)

26. "A family is a functioning group of people related by marriage, adoption or genetics who all regard one another as part of their 'family' and who prefer to spend considerable time together and often help achieve individual and shared goals. A crisis is anything which disrupts any of this completely or 'seriously' in the view of any family member". (1)

27. "Family undergoing dissonant relationships which result in unbalance and lack of cohesion". (1)

28. "A crisis is any situation in which family members, singly or jointly, are unable to adequately cope (according to their own perceptions) and therefore generally seek outside assistance". (2)

29. "Usually the onset is shown with individual member or pair (marital) shown an inability to have psychological needs met. The child, for example, may be in jeopardy and identified yet the pathology is based on needs within family as a system not being met". (1)

30. "A family crisis is usually experienced as a disequilibrium in the family system caused by powerful external forces or internal maturational changes. The situation is most likely defined as threatening by family members, and the usual ways of coping may seem inadequate. The family may need assistance in mobilizing resources and finding creative solutions". (3)

31. "Any situation that disrupts or threatens to disrupt established family relationships, both internal and/or external". (1)

32. "A situation of potentially hazardous or negative import affecting directly at least one and indirectly all members of a family unit. The perceived difficulty does not have an evident, immediate or readily accessible solution within the family resources although solutions must be attempted to correct the situation". (1)

33. "A point in which one or more family members are in disharmony within the family unit. At this point understanding and communication has totally broken down and the problem(s) cannot be resolved and outside intervention is the only alternative". (1)

34. "Family crisis can be equated with particular stressful periods in family life that urgently requires a solution. They represent a severe threat to the satisfaction of basic needs and result in a state of disequilibrium from which the family as a unit (system) must extricate themselves in order to survive. Thus it is a period of increased vulnerability as well as increased potential for growth. At the time of a crisis old methods of problem solving don't work and assistance may be needed to resolve this state of disequilibrium". (3)

35. "Occurs when normal communication and respect begin to break down as is evident by the deteriorating of interpersonal relationships between family members". (1)

36. "Recognition or realization by one or more family members that current interaction patterns within the unit are hurting individual member(s) and/or the unit's integrity is threatened and/or some kind of change is required to rebalance relationships -- may be precipitated by an event or circumstance or occur developmentally". (1)

37. "A family unable to cope with day to day problems in the home and community. This may affect the whole family or a part thereof". (2)

38. "A family crisis is any event which negatively affects the working of a family system. It may be events such as illness, death, trouble with the law, separation, admitting defeat of a chronic problem, etc. I see it as a point in the history of a family when important aspects become dysfunctional". (1)

39. "A temporary state of affairs experienced by a family involving stresses and/or problems of unusual severity which may result in a need for short-term professional assistance". (1)

40. "Any situation in which the family unit is threatened with disintegration; or the family members are threatened with physical or emotional abuse by other family members or by others; or the family is undergoing sickness, loss, economic privation, death, separation, or any factor that could undermine the productivity, happiness and stability of any individual in the family unit, and the family itself". (1)

41. "It is a situation in which difficulties occur within the family unit that threaten the unity of unit and which could potentially result in the family dissolution. Essentially, there are tensions beyond those characteristic of the family which affect every member detrimentally". (1)

42. "An individual's crisis may be incorrectly called a family crisis when a member or members of a family unit are not able to obtain certain required needs from said family unit. These needs may or may not conflict with others in the unit, and so on". (1)

43. "The basic needs of one or more family members are consistently not being met (physiological, safety, affectional, belonging) so that one or more family members become dysfunctional. Often involves marital or family breakdown, sudden tragedy, habitual depression or aberrant social behavior". (1)

44. "A crisis occurs when a behavioral-emotional pattern which has developed between two or more members of a family can no longer be accepted or emotionally endured by one or more of the participants. Such a crisis may be precipitated by an event, but the event itself does not properly constitute a part of the crisis". (2)

45. "- A stressful precipitating event
- followed by cognitive/affective disturbance in some family members.
- Continuing for several days (at least)". (2)

46. "A temporary complete disruption of the structure and communication pattern of the family unit, as the result of an event or series of events that upset the established symbiosis. It leads to a reorganization or redefinition of that unit, either in terms of structure or in terms of communication within the unit or between the unit and the 'outside' world". (2)

47. "When a particular 'problem' or group of problems produces a level of stress within the family system which is so far beyond the family's coping mechanisms as to cause the family system to move toward disintegration rather than pulling together to meet a challenge. (Small steps beyond our limits produce challenges -- large ones break down the system). Unfortunately this definition is only in the negative. A more positive definition could include the 'challenges' as well, i.e. any stress which exceeds the present limits of the family's system of coping. I prefer this definition with a breakdown into normal 'challenges' vs. large 'disasters'". (3)

48. "Occurs when a family experiences threats to its continuance in its present form. It can occur as internal or external pressures". (1)

49. "A family crisis for me is when one or more members of the family group cannot, because of internal or external constraints, be the person or lead the life that he/she wants or needs". (2)

50. "An event which is seen as a threat to the family being able to survive as a unit, and which directly threatens the well being of one or more of the family members". (1)

51. "Any crucial situation which has the potential for negative long term effect on the family unit or individual family members". (1)

52. "It's a situation in which the family or part of it is unable to cope, or the way in which they are coping is unacceptable socially". (2)

53. "A condition that threatens some or all members of a family; and causes feelings of personal failure or inability to control the quality of interpersonal relations. The associated communications breakdown motivates each to be self centered and survival oriented". (1)

54. "A situation in which the family system is placed under stress and the family responds in a dysfunctional manner". (1)

55. "A manifestation in the family's functioning of disorganization or maladaptive behavior associated with internal or external events which challenge the family's adaptive ability". (1)

56. "When a family recognizes its need for help as a group. When it can no longer, as a unit, manage the anxieties of its members, or fulfill the normal functions of a family". (1)

57. No Definition (0)

58. "Could be a chronic or acute state of emotional discomfort, but is presently seen as unbearable or that they can no longer cope". (1)

59. "When a family (or single parent) is confronted with events for which no devices or techniques are available for coping or when energy or motivation have been exhausted, crises occur. Crises force a redefinition of ones capacity to cope or of a family's capacity to do so". (2)

60. "I have virtually redefined crises in the last five years. Only suicide and homocide are crises. All else are situations which are so unexpected or so ill prepared for that one or more members of the family are not capable of coping without upset". (2)

61. No Definition (0)

62. "A major disruption in family routine which creates sufficient distress in one or more members of the family to cause them to seek professional help". (2)

63. "A family crisis is a situation in which the well-being of a family as a unit is threatened, mostly by going through a period of seemingly uncontrollable tension which is intensified by a lack of proper communication or understanding, and a failure to react positively (mostly in the area of interpersonal relationships). I am speaking here not merely of a short-term problem or of a passing tragedy, but rather of a prolonged, deepening state of uneasiness, unhappiness or dissatisfaction or situation pointing to disaster or to most unfortunate outcomes and in which the family as a whole is in sore need of professional (or friendly and very capable) assistance in order to gain valuable insight into the total situation and encouragement to react positively thus altering the critical condition and avoiding undesirable and painful consequences. (N.B. well-being, here, involves the moral, psychological, mental, affective, physical, or material aspects of the family group)". (3)

64. "A family in which one or more members are unable to function in an acceptable manner (acceptable to himself and/or his family and/or his social environment". (2)

65. "A family crisis is defined by the family and arises from an anticipated change(s) or perceived change(s)". (2)

66. "Family crisis - family system functioning has been stopped, usually abruptly, by some event. Former ways the family had of coping with situations don't work in this situation, and new ways of coping must be found. Family structure, goals and values are usually threatened by this". (1)

67. "Similar to a personal crisis - when the resources available within the individual or family do not cover the difficulties or problems which have arisen". (2)

68. "- family members feel they are unable to cope with a situation.
- may not be a sudden event but a long-standing problem that can no longer be tolerated.
- emotional responses may hinder reasoning out the problem.
- compromise may be necessary for a solution to be reached". (2)

69. "Family crisis includes any situation in the family in which there is a degree of stress and/or tension which cannot be dealt with effectively by the individual members of the family". (1)

70. "A family crisis is any intervention that challenges the existing patterns of interpersonal relationships in a way that is perceived as threatening by one or more members". (1)

71. "Family crisis is a change in the status or the condition of a family (external or internal) which is disruptive and hurtful to the family as a whole or one or more individual members. This may be an uncontrollable event external to the family (eg., economic or natural disaster) or involving the family directly (eg., death of a family member, birth of a defective child). Or, this may be the change in response of a family member (or members) to a long term or progressively changing situation (eg., deteriorating communication/relationship patterns, long-term isolation, improving financial status or increasing age of children)". (1)

72. "A family crisis is a period in a family's development when events, external - i.e. in the family's environment or internal - i.e. in the interactional patterns of the family, are such that the family feels incompetent or unable to maintain its functioning with its available and usual resources and believes that a change is necessary for the continued functioning of the family unit and turns to an outsider perceived to have some ability to help". (1)

73. "In practice a family is in crisis when one or both of the parents seek me out to ask my help in resolving a situation they consider to be a crisis -- they report themselves as 'desperate', 'unable to cope', 'at my wits end', 'don't know where to turn', etc." (2)

74. "A family crisis is one where its members are threatened or in a state of anxiety because unexpected or unresolved problems have surfaced. The family has reached a stand-still and must either change its orientation or be destroyed". (1)

75. "An event in a family's history which precipitates some change and reorganization within the family system. Although the word 'crisis' generally has a negative connotation, the degree of disruption and disorganization within the system, rather than inhering in the event itself, is dependent upon the inner resources of the family members, the relative strength or weakness of the system itself, and/or the availability of external support and can result in greater cohesiveness within the family or, at the opposite extreme, family breakdown". (3)

76. "A situation which threatens the unity of the family, which demands some change in goals, values, or relationships for resolution (positive or negative). May occur 'naturally' (eg., first child leaving home) or may be a 'problem' type crisis (eg., child in trouble with the law)". (3)

77. "Involves a situation in which some or all members of a family have reached a point where they have lost all aspects of communication skills and are reacting in a highly emotional, possibly angry or severely anxious manner. There is, from the family's perspective, no solution and relationships within and outside the family structure have deteriorated substantially". (1)

78. "A family is in crisis when the members cannot creatively resolve the problems held by one or all members, and as a consequence the family structure breaks down". (1)

79. "A family crisis occurs when the emotional or physical welfare of any, or all, family member(s) is threatened". (1)

80. "Any situation which places two or more family members in a state of emotional stress. It may be due to financial, interpersonal, emotional, physical or any other cause which has a sudden onset". (1)

81. "- communication between family members breaks down, or
- family members become unhappy with this break down
- leads to negative feelings that are not resolved.
- external force (death for example, child missing)
- value differences between family members for which there is no
- compromise or possibility of existence unless one changes.
eg., husband's eccentric religion and changes lifestyle". (1)

82. "A decisive moment, critical time which threatens the family system". (1)

83. No Definition (0)

84. No Definition (0)

85. No Definition (0)

86. "A situation involving directly at least two family members and affecting all other members which those involved cannot handle; high emotions; disruption or cessation of regular day-to-day functioning and interaction". (1)

87. "A family crisis is a situation, event, or conflict which threatens the equilibrium of the family system". (1)

88. "Components are: no alternatives available, no compromise or adjustment possible -- as perceived by key family members. Increased stress and tension evidenced by withdrawal or violent tendencies". (1)

89. "A lengthy period during the development and growth of the family in which there occurs disruption of normal working and living relationships. Person(s) within the family perceive the period as anxiety producing -- to the extent that they seek help from outside the family". (1)

90. "A situation in which a family experiences tension and stress, frequently triggered by an event happening to the member(s) of the family. Such tension, in the long run, could be either positive or negative, depending on the family's resolution". (3)

91. "A family's adaptive abilities no longer are able to cope with external or internal demands -- the family is no longer in a steady state -- homeostatis". (1)

Appendix G

Additional Results of Analysis

Table	XII	Means and Standard Deviations
Table	XIII	Correlation Matrix
Table	XIV	Twenty-Six Initial Factors
Table	XV	Communalities
Table	XVI	Unrotated Factor Matrix
Table	XVII	Factor Score Coefficients
Table	XVIII	Raw Data

TABLE XII

MEANS AND STANDARD DEVIATIONS

VARIABLE	MEAN	STANDARD DEV	CASES
ITEM1	3.2747	1.2655	91
ITEM2	3.6154	1.1428	91
ITEM3	3.2857	0.8470	91
ITEM4	3.2198	1.2455	91
ITEM5	1.8571	0.9377	91
ITEM6	2.8022	1.4774	91
ITEM7	2.9780	1.1736	91
ITEM8	3.6484	1.0992	91
ITEM9	3.8791	1.0524	91
ITEM10	4.2088	0.9489	91
ITEM11	4.2857	0.7643	91
ITEM12	4.1099	1.0160	91
ITEM13	3.9231	0.9337	91
ITEM14	3.6374	0.9946	91
ITEM15	4.5494	0.6543	91
ITEM16	4.3516	0.7941	91
ITEM17	3.9121	1.1513	91
ITEM18	3.4725	1.1386	91
ITEM19	3.0220	0.9658	91
ITEM20	3.2418	1.0257	91
ITEM21	3.3736	1.3470	91
ITEM22	3.3736	1.1120	91
ITEM23	3.1868	1.2010	91
ITEM24	1.8462	1.2730	91
ITEM25	2.2418	1.0365	91
ITEM26	3.5714	1.0343	91

TABLE XIII

CORRELATION MATRIX

	ITEM1	ITEM2	ITEM3	ITEM4	ITEM5	ITEM6	ITEM7	ITEM8	ITEM9	ITEM10
ITEM1	1.00000	0.21217	0.01925	-0.10218	-0.05083	0.07693	0.01159	-0.10550	-0.21674	-0.10382
ITEM2	0.21217	1.00000	0.16070	-0.15853	0.22810	-0.00607	0.24217	-0.03810	0.07178	0.24907
ITEM3	0.01925	0.16070	1.00000	0.12940	0.21982	0.09006	0.28582	0.06137	0.06411	0.22909
ITEM4	-0.10218	-0.15853	0.12940	1.00000	0.11280	-0.01234	0.20859	-0.00785	0.17309	0.04536
ITEM5	-0.05083	0.22810	0.21982	0.11280	1.00000	0.27612	0.17885	-0.08161	0.08364	0.09633
ITEM6	0.07693	-0.00607	0.09006	-0.01234	0.27612	1.00000	0.19612	0.02511	-0.17278	0.01394
ITEM7	0.01159	0.24217	0.28582	0.20859	0.17885	0.19612	1.00000	-0.04912	-0.04716	0.01414
ITEM8	-0.10550	-0.03810	0.06137	-0.00785	-0.08161	0.02511	-0.04912	1.00000	0.04929	0.26292
ITEM9	-0.21674	0.07178	0.06411	0.17309	0.08364	-0.17278	-0.04716	0.04929	1.00000	0.27035
ITEM10	-0.10382	0.24907	0.22909	0.04536	0.09633	0.01394	0.01414	0.26292	0.27035	1.00000
ITEM11	0.12473	0.22898	0.28442	0.13174	0.15060	-0.02812	0.27960	0.20027	0.02960	0.29986
ITEM12	0.02811	0.28562	0.19551	0.11242	0.26157	-0.01497	0.16047	0.00514	0.53217	0.19492
ITEM13	-0.01953	0.41973	0.23884	0.17713	0.16497	0.10967	0.34320	0.13574	0.22790	0.18137
ITEM14	0.07120	0.33537	0.17711	0.11887	0.03914	-0.16278	0.12636	-0.01631	0.06381	0.09289
ITEM15	0.11090	0.03315	0.03437	0.17741	-0.06985	0.01023	0.01590	0.11714	0.04912	0.26059
ITEM16	-0.10826	0.13846	0.29500	0.28051	-0.02132	0.05048	0.19916	0.02868	0.17110	0.16691
ITEM17	-0.14339	-0.10199	0.03744	0.12211	0.04999	0.15297	-0.00967	-0.04226	0.17455	-0.10506
ITEM18	-0.03712	0.12414	0.10039	0.13750	0.01189	-0.01648	0.09932	0.10760	0.10384	0.29846
ITEM19	0.03137	0.32987	0.15522	-0.02253	0.18752	0.07316	0.08865	-0.03450	0.11196	0.06768
ITEM20	0.25643	0.32667	0.13703	0.06232	0.20958	0.14189	0.09677	0.02697	0.07885	0.33572
ITEM21	0.06296	0.33980	0.22677	0.08297	0.21865	0.08222	0.20206	-0.00033	0.06357	0.06869
ITEM22	-0.26324	-0.02556	0.33366	0.06841	-0.07611	-0.17770	0.20218	-0.09130	0.35234	-0.07475
ITEM23	0.14131	0.19055	0.02340	-0.06489	0.04369	0.19013	-0.01282	0.08398	0.00048	0.16039
ITEM24	0.06101	0.16509	0.21640	-0.07655	0.38162	0.06044	0.17621	-0.11056	-0.18821	0.06368
ITEM25	0.11823	0.07938	-0.06690	0.03585	-0.10126	-0.04824	-0.05039	0.30951	-0.06459	0.12887
ITEM26	0.36259	0.05640	0.21741	0.04805	0.18820	0.28565	0.14776	0.08097	-0.31353	0.16011

	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17	ITEM18	ITEM19	ITEM20
ITEM1	0.12473	0.02811	-0.01953	0.07120	0.11090	-0.10826	-0.14339	-0.03712	0.03137	0.25643
ITEM2	0.22898	0.28562	0.41973	0.33537	0.03315	0.13846	-0.10199	0.12414	0.32987	0.32667
ITEM3	0.28442	0.19551	0.23884	0.17711	0.03437	0.29500	0.03744	0.10039	0.15522	0.13703
ITEM4	0.13174	0.11242	0.17713	0.11887	0.17741	0.28051	0.12211	0.13750	-0.02253	0.06232
ITEM5	0.15060	0.26157	0.16497	0.03914	-0.06985	-0.02132	0.04999	0.01189	0.18752	0.20958
ITEM6	-0.02812	-0.01497	0.10967	-0.16278	0.01023	0.05048	0.15297	-0.01648	0.07316	0.14189
ITEM7	0.27960	0.16047	0.34320	0.12636	0.01590	0.19916	-0.00967	0.09932	0.08865	0.09677
ITEM8	0.20027	0.00514	0.13574	-0.01631	0.11714	0.02868	-0.04226	0.10760	-0.03450	0.02697
ITEM9	0.02960	0.53217	0.22790	0.06381	0.04912	0.17110	0.17455	0.10384	0.11196	0.07885
ITEM10	0.29986	0.19492	0.18137	0.09289	0.26059	0.16691	-0.10506	0.29846	0.06768	0.33572

TABLE XIII CONTINUED

	ITEM11	ITEM12	ITEM13	ITEM14	ITEM15	ITEM16	ITEM17	ITEM18	ITEM19	ITEM20
ITEM11	1.00000	0.10221	0.29584	0.06473	0.12697	0.12554	-0.00902	0.22618	0.18708	0.27943
ITEM12	0.10221	1.00000	0.50095	0.24879	0.10874	0.36475	0.03685	0.08908	0.33720	0.15548
ITEM13	0.29584	0.50095	1.00000	0.42428	0.23365	0.44152	-0.02703	0.15999	0.37152	0.35610
ITEM14	0.06473	0.24879	0.42428	1.00000	0.34373	0.31801	-0.10577	0.02544	0.40165	0.27205
ITEM15	0.12697	0.10874	0.23365	0.34373	1.00000	0.26557	-0.11217	0.30386	0.12134	0.23034
ITEM16	0.12554	0.36475	0.44152	0.31801	0.26557	1.00000	0.11927	0.05996	0.29405	0.01724
ITEM17	-0.00902	0.03685	-0.02703	-0.10577	-0.11217	0.11927	1.00000	0.05747	-0.00824	-0.15117
ITEM18	0.22618	0.08908	0.15999	0.02544	0.30386	0.05996	0.05747	1.00000	0.15211	0.30068
ITEM19	0.18708	0.33720	0.37152	0.40165	0.12134	0.29405	-0.00824	0.15211	1.00000	0.21890
ITEM20	0.27943	0.15548	0.35610	0.27205	0.23034	0.01724	-0.15117	0.30068	0.21890	1.00000
ITEM21	0.24052	0.20511	0.18213	0.35106	0.19313	0.01084	-0.11471	0.15166	0.24983	0.22341
ITEM22	-0.06163	0.21895	0.23131	0.23436	-0.04095	0.40321	-0.02613	0.01697	0.14745	-0.05085
ITEM23	0.08646	0.07405	0.19130	0.12245	0.15072	-0.04635	-0.00406	0.06473	0.22630	0.09823
ITEM24	0.19414	0.10772	0.13950	0.15729	-0.08415	0.02114	-0.17612	-0.11793	0.13834	0.07986
ITEM25	0.13626	-0.02551	0.09980	0.16144	0.14602	-0.05044	0.00870	0.33522	0.19442	0.27887
ITEM26	0.38150	-0.00755	0.00000	0.11726	0.26973	0.03672	-0.05065	0.05122	0.15412	0.32916

	ITEM21	ITEM22	ITEM23	ITEM24	ITEM25	ITEM26
ITEM1	0.06296	-0.26324	0.14131	0.06101	0.11823	0.36259
ITEM2	0.33980	-0.02556	0.19055	0.16509	0.07938	0.05640
ITEM3	0.22677	0.33366	0.02340	0.21640	-0.06690	0.21741
ITEM4	0.08297	0.06841	-0.06489	-0.07655	0.03585	0.04805
ITEM5	0.21865	-0.07611	0.04369	0.38162	-0.10126	0.18820
ITEM6	0.08222	-0.17770	0.19013	0.06044	-0.04824	0.28565
ITEM7	0.20206	0.20218	-0.01282	0.17621	-0.05039	0.14776
ITEM8	-0.00033	-0.09130	0.08398	-0.11056	0.30951	0.08097
ITEM9	0.06357	0.35234	0.00048	-0.18821	-0.06459	-0.31353
ITEM10	0.06869	-0.07475	0.16039	0.06368	0.12887	0.16011
ITEM11	0.24052	-0.06163	0.08646	0.19414	0.13626	0.38150
ITEM12	0.20511	0.21895	0.07405	0.10772	-0.02551	-0.00755
ITEM13	0.18213	0.23131	0.19130	0.13950	0.09980	0.00000
ITEM14	0.35106	0.23436	0.12245	0.15729	0.16144	0.11726
ITEM15	0.19313	-0.04095	0.15072	-0.08415	0.14602	0.26973
ITEM16	0.01084	0.40321	-0.04635	0.02114	-0.05044	0.03672
ITEM17	-0.11471	-0.02613	-0.00406	-0.17612	0.00870	-0.05065
ITEM18	0.15166	0.01697	0.06473	-0.11793	0.33522	0.05122
ITEM19	0.24983	0.14745	0.22630	0.13834	0.19442	0.15412
ITEM20	0.22341	-0.05085	0.09823	0.07986	0.27887	0.32916
ITEM21	1.00000	0.00220	0.15555	0.09221	0.03804	0.28368
ITEM22	0.00220	1.00000	-0.02788	-0.06883	-0.05032	-0.24564
ITEM23	0.15555	-0.02788	1.00000	-0.06820	0.10613	0.19933
ITEM24	0.09221	-0.06883	-0.06820	1.00000	-0.04729	0.18565
ITEM25	0.03804	-0.05032	0.10613	-0.04729	1.00000	0.25319
ITEM26	0.28368	-0.24564	0.19933	0.18565	0.25319	1.00000

DETERMINANT OF CORRELATION MATRIX = 0.00027850 (0.27847313E-03)

TABLE XIV

TWENTY-SIX INITIAL FACTORS

FACTOR	EIGENVALUE	PCT OF VAR	CUM PCT
1	4.42916	17.0	17.0
2	2.63240	10.1	27.2
3	2.05290	7.9	35.1
4	1.65326	6.4	41.4
5	1.45111	5.6	47.0
6	1.34394	5.2	52.2
7	1.15058	4.4	56.6
8	1.07419	4.1	60.7
9	1.00658	3.9	64.6
10	0.98551	3.8	68.4
11	0.93837	3.6	72.0
12	0.89733	3.5	75.4
13	0.81819	3.1	78.6
14	0.73807	2.8	81.4
15	0.68852	2.6	84.1
16	0.61555	2.4	86.4
17	0.55910	2.2	88.6
18	0.54159	2.1	90.7
19	0.45312	1.7	92.4
20	0.41672	1.6	94.0
21	0.36996	1.4	95.4
22	0.32795	1.3	96.7
23	0.27283	1.0	97.8
24	0.22180	0.9	98.6
25	0.18972	0.7	99.3
26	0.17144	0.7	100.0

TABLE XV

COMMUNALITIES

VARIABLE	COMMUNALITY
ITEM1	0.43190
ITEM2	0.58328
ITEM3	0.48026
ITEM4	0.43925
ITEM5	0.60240
ITEM6	0.63371
ITEM7	0.45315
ITEM8	0.36807
ITEM9	0.70069
ITEM10	0.59682
ITEM11	0.52009
ITEM12	0.59665
ITEM13	0.58745
ITEM14	0.65523
ITEM15	0.49503
ITEM16	0.60914
ITEM17	0.50747
ITEM18	0.41429
ITEM19	0.48028
ITEM20	0.46953
ITEM21	0.30814
ITEM22	0.57775
ITEM23	0.39207
ITEM24	0.55734
ITEM25	0.42573
ITEM26	0.67747

TABLE XVI

UNROTATED FACTOR MATRIX

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
ITEM1	0.12961	0.53382	-0.07393	-0.27887	-0.14902	0.15714
ITEM2	0.56699	0.10846	-0.16520	-0.36780	0.29311	-0.03957
ITEM3	0.48058	-0.11911	-0.25861	0.29005	-0.16109	-0.24116
ITEM4	0.22916	-0.24400	0.10306	0.44220	-0.34239	0.06172
ITEM5	0.35540	0.10277	-0.49524	0.26008	0.39026	0.01788
ITEM6	0.13286	0.30306	-0.27990	0.42589	0.08886	0.50654
ITEM7	0.41490	-0.05408	-0.36206	0.27296	-0.25381	-0.08984
ITEM8	0.13124	0.09905	0.47804	0.24356	0.11522	-0.19978
ITEM9	0.25313	-0.62495	0.22000	0.02578	0.44254	0.03383
ITEM10	0.44825	0.05619	0.35890	0.20168	0.35150	-0.31574
ITEM11	0.51496	0.24089	0.04340	0.29423	-0.00423	-0.32925
ITEM12	0.56252	-0.39926	-0.09166	-0.09613	0.29426	0.12877
ITEM13	0.71791	-0.24124	-0.02274	-0.07147	0.00908	0.09027
ITEM14	0.57036	-0.11301	0.01781	-0.46068	-0.32111	0.03867
ITEM15	0.40653	0.10877	0.43491	-0.03276	-0.33659	0.12013
ITEM16	0.47273	-0.46942	-0.00256	0.10896	-0.37306	0.11941
ITEM17	-0.07352	-0.22623	0.01628	0.43844	0.10940	0.49640
ITEM18	0.35810	0.05871	0.48373	0.20110	0.07565	-0.04940
ITEM19	0.56360	-0.05027	-0.06777	-0.28377	0.03842	0.27115
ITEM20	0.56320	0.32046	0.15819	-0.06402	0.13547	-0.04662
ITEM21	0.49978	0.16713	-0.12779	-0.11472	-0.01487	0.02682
ITEM22	0.20506	-0.67012	-0.06423	-0.10591	-0.25182	-0.08877
ITEM23	0.27290	0.22867	0.12402	-0.13042	0.17553	0.44956
ITEM24	0.25174	0.20693	-0.55212	-0.03352	0.03694	-0.37923
ITEM25	0.23846	0.29516	0.52458	-0.05138	-0.05998	0.01830
ITEM26	0.37822	0.64301	-0.04764	0.21885	-0.25187	0.08576

TABLE XVII

FACTOR SCORE COEFFICIENTS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
ITEM1	0.14094	-0.07343	0.24875	-0.06335	-0.06747	-0.01563
ITEM2	0.24486	-0.02185	-0.06081	-0.19247	0.09025	-0.07990
ITEM3	-0.08639	0.02960	0.00579	0.19218	0.24048	-0.04302
ITEM4	-0.13402	0.06491	0.04255	0.32569	-0.01290	0.11343
ITEM5	0.03734	-0.02828	-0.10350	-0.12805	0.29617	0.21536
ITEM6	0.02953	-0.06337	0.10130	0.01750	0.02924	0.47810
ITEM7	-0.05935	-0.05493	0.07839	0.22206	0.20004	0.02449
ITEM8	-0.11493	0.29908	-0.05499	-0.01895	0.00011	-0.02404
ITEM9	0.08307	0.10074	-0.36809	-0.07636	-0.03325	0.07420
ITEM10	-0.04774	0.33077	-0.16110	-0.11351	0.13038	-0.04970
ITEM11	-0.09848	0.21565	0.03960	0.05166	0.22260	-0.06353
ITEM12	0.19453	-0.02446	-0.21647	-0.03992	0.02690	0.08478
ITEM13	0.16883	0.00329	-0.06468	0.08947	0.00584	0.02180
ITEM14	0.22319	-0.09889	0.10685	0.13492	-0.11620	-0.20788
ITEM15	0.05745	0.12390	0.15903	0.18049	-0.19944	-0.02986
ITEM16	0.03304	-0.05650	0.00455	0.33590	-0.06372	0.01784
ITEM17	-0.01973	-0.02139	-0.08452	0.08825	-0.10676	0.43928
ITEM18	-0.02884	0.27267	-0.03748	0.02412	-0.05512	0.03484
ITEM19	0.26481	-0.08608	0.00698	-0.00988	-0.08564	0.05911
ITEM20	0.11242	0.15498	0.04294	-0.09022	0.03825	-0.01547
ITEM21	0.13143	-0.01372	0.07057	-0.00268	0.05814	-0.01119
ITEM22	0.02207	-0.10660	-0.11397	0.23752	-0.02622	-0.15671
ITEM23	0.21879	-0.00505	0.04380	-0.11433	-0.17150	0.23543
ITEM24	-0.02038	-0.07442	0.04041	-0.05624	0.35157	-0.16751
ITEM25	0.03629	0.21386	0.09969	-0.01112	-0.15814	-0.03873
ITEM26	-0.01384	0.07280	0.29992	0.08859	0.06155	0.11013

TABLE XVIII

RAW DATA[1]

0154211113333434551342243122111112	6011452535255222555522231225212 12
0245342353555554554555343335111113	6144452325455552344423135233212 20
0313352225554554553543444223111112	6243323333555543545534243333212 32
0444332144355433433423433335111111	6355453151245545554342535515221 33
0523224513553523445233224125111112	6454432234345444434444432332213 2
0623222222344432442233422523111111	6531251222523422345322321122213 2
0733211224344334435423144133111112	6644252113545555551445441123221 31
0831321424224122235211544114111121	6743442543443534553424432125222 12
0935445445555555555555545455111121	6845444424355454455445324425222 12
1025411144554555553532555113111121	6923522535555543553342555135222 12
1113431225554552554332245123111121	7033321214443333555332232113222 21
1244323532334535334355241241112 1	7133432235535543445533443112222 1
1323241134444334555422541133111121	7245431544555555555555545135222 21
1413311114434333445131131511111 22	7344352335555544555334524235222 22
1534432345555444443444343233111 22	7425534533255554554444444224222 21
1655331555355543444133313135111 31	7523341124554544555534453143222 23
1755531443555555555454554323111 31	7635451132544545554422551113222 33
1842321222552535554223355123111 32	7755543545254455553324421515222 31
1924434342445555454235444513111 31	7824432344343333345332432121222 31
2034321133344332445343331331121 2	7934422134345444532334433325222 31
2154432333554543344333243223112 11	8023353235445444555443334225222 31
2234322533555443555423142113112 12	8153452144445555545445522145222 31
2325242235555554543542415122112 11	8235241524445443554534544144222 31
2422241552134154544523134143112 21	8322351223455345555243445114000 00
2553334545514552444123353113112 21	8453331155335434554323243134000 00
2625222433544432424424522121122 1	8533322225444445535433325542321 0
2732221435353343534434123133112 21	8644352244555443545321325123232 11
2853251512333332535333115123112 22	8714422444444554555442544113232 21
2914432244444444343334343331123 1	8852311515354333545433214114132 31
3033432233454443453431432341123 3	8944334541444533445443533413132 21
3131451143555553554524241113121 11	9035443222543545455242342222132 13
3254421224355322554535313135121 11	9124442543554444444344554224132 31
3354331554245554552424525425121 11	
3455231315443554555523324153121 23	
3535221134455454453133333133121 21	
3645332143545554545444443135121 21	
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4042332115555535532333523133122 21	
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5924432235455543454433241123211 32	

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[1] See Appendix D.